

UNDERSTANDING THE SOURCES OF STUDENTS' SELF-EFFICACY  
DEVELOPMENT IN A CHINESE HIGHER VOCATIONAL INSTITUTE

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BY

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## DEDICATION

I would like to dedicate this dissertation to all my students who have made my profession a joy and provided me with the fuel to continuously improve and develop myself as an educator.

I would also like to dedicate this achievement in my academic studies especially to my late father who taught me as a child to always be hungry to learn and never be sated.



## ABSTRACT

Self-efficacy theory (Bandura, 1997) posits that if individuals believe they have the capability to perform well in their endeavours, they are more inclined to be motivated, invest more effort and persist in the face of adversity (Klassen & Usher, 2010; Pajares & Schunk, 2001; Zimmerman, 2000). The study of efficacy beliefs is still a relatively new area of research in Chinese society (Kwan, Hui & McGee, 2010) and research into the influence of perceived self-efficacy or one's efficacy belief on academic achievements is limited, especially in the context of vocational education. The purpose of this study is to understand the development of efficacy beliefs of Chinese students in vocational education. This study adopted a qualitative approach using face to face interviews in the data collection, and thematic analysis was used to analyse data collected from participants who were studying on a Sino-Australian hotel management programme at a higher vocational institute in China.

The findings from this study indicated that the major sources of self-efficacy development are consistent with Bandura's (1997) four hypothesized sources of self-efficacy. The findings also indicated that Influences of these sources of self-efficacy can be both positive in increasing perceived self-efficacy and negative by undermining efficacy beliefs development, depending on varying conditions such as how the information is valued and interpreted, and the timing of information received. Self-talk was found in this study as self-encouragement as well as a copying strategy to overcome anxieties and stressful situations. Participants also reported the beneficial influence of collective efficacy in the foreign component of their Sino-Joint Venture programmes as well as on their internship workplace. This study found that despite some participants' with self-reported low perceived self-efficacy in certain

domains, expressed the willingness and necessity to persevere with more effort to gain a chance of success. The findings also indicated that the participants generally believe that effort investment is necessary for achievement; however it is also necessary to first have belief in their capabilities. The implications are that the development of self-efficacy beliefs is important to help them make sense of their commitment to hard work and that the development of collective efficacy at the institutional level can change how vocational education is perceived in China.

**Key words:** Chinese students; collective efficacy; effort investment; internship; mastery experience; perceived self-efficacy; physical and emotional status; qualitative research; relational efficacy, self-efficacy beliefs; sources of self-efficacy; vicarious experience; self-talk; social cognitive theory; vocational education.

## FOREWORD – RESEARCHER’S BACKGROUND, POSITION AND SUBJECTIVITY

My career in education started in 1986. I was invited to return from Switzerland, where I was working as a chef in a hotel at a ski resort, to teach at the vocational college in Adelaide, South Australia where I completed my trade qualification. Becoming an educator was never in my career plans. Nevertheless, I felt honoured that the Head of School, who was also one of my former teachers, considered me worthy enough to join his team - that he would call me from half-way around the world to offer me the position. Therefore, it would have been highly impolite to turn down his offer. Moreover, in my roles as ‘Sous Chef’, or second-in-charge in the kitchen, one of my main responsibilities included the training of apprentices and cooks. Therefore, teaching at a vocational institution was, for me then, not much different a job to training large numbers of apprentice cooks. Little did I know that this new career direction would lead me into working in higher education and developing new schools and programmes in different countries.

During my doctorate journey, I have often thought about how I got here. It always somehow came back to that fortuitous occasion when I was offered a teaching position and I accepted the position because my former teacher believed that I was good enough to join his teaching team. According to Bandura (2001), although people generally try to exercise certain measures of control over their personal development and life situations, the courses they take in their lives also involve much fortuity: *“People are often inaugurated into new developmental trajectories, marital partnerships, occupational careers, or untoward life paths through fortuitous circumstances”* (p.11). According to Bandura (1982, 1998), the effect of most

fortuitous encounter rests not so much in the peculiarities of the events themselves, but in the constellation of transactional effects they put in motion. For example, receiving the job offer that I had not applied for, nor even knew such a position existed, was a fortuitous event which produced a chain of events that led me to this stage in my career. In my situation, entering the vocational education teaching environment in Australia meant that I had to upgrade my qualification from a trade certificate to a diploma in teaching in order to qualify to teach certificate level courses. Later, as I progressed to teaching higher award level courses, my education qualification was also subsequently upgraded. In other words, I would probably not have undertaken this doctorate programme if I had continued my pursuit of a culinary career. At the same time, I would probably not have pursued a career in vocational education if it were not for my culinary profession. Subsequently, apart from my trade qualification in commercial cookery, I also hold a 'Chef Educator' Certificate, Diploma in Teaching (Adult and Further Education), Bachelor of Education (Further Education) and Master's in Education. This does not mean that I had no hand in the way my career path has panned out. As Bandura (1997) put it, *"People are producers as well as products of their social environment."* (p.6). My decision to choose a major career change into education was largely to do with the value of education instilled in me by my father and that my former teacher believed in me, and these were my sources of self-efficacy that I could be a competent educator, even though being an educator was not then my passion.

It is often said that our behaviour is partly ruled by our values and self-evaluative standards and, through this inner source of guidance, we provide direction to our lives and gain satisfactions from what we endeavour. Our parents are our first

teachers and, therefore, are the first people who influence our intellectual development during our early childhood. The older women in my family such as my grandmother, mother and eldest sister, who were also my role models, were all born in China and, because any form of formal education was deemed unnecessary when they were still living in China, they never went to school at all. My eldest sister did however attend a few years of primary school when she migrated with my mother to Singapore at the age of eleven, as primary school education was then compulsory by law. Despite the lack of tradition for women in my family to receive any schooling beyond primary school, my father did try to instil in me the importance of education - especially a western education - by sending me to English medium school when it was a more common practice for girls of my generation to attend Chinese, Malay or Tamil medium schools in Singapore, according to our ethnic background. My father's idea that a western education was superior to an education in Chinese in 1960, suggested that he foresaw the advantages of a western education for my future. His conception of the advantage of a western education still prevails amongst many Chinese parents today.

My career in education has always been hospitality industry-related. Initially I taught at tertiary vocational education institutions, followed by higher education institutions. It was at this latter stage of my teaching career that I realised that not everyone who enters university can cope with the demands or is always interested in studying. My preconception, that any student who could make it into university is naturally academically inclined, was very quickly shattered. Furthermore, over the past two decades or so, I witnessed the need for higher education institutions (HEIs) to be more competitive for student numbers for their survival. At the same time, the number

of students requiring academic support and remediation, including those with special learning needs, has also increased.

I am conscious of my internal conflict with the mismatch of students' preparedness and expectations of academia in higher education institutions (HEIs). Although I do support private education, or the 'user payer system' adopted by countries such as Australia, I do not support education being sold as a product with no after-sales service, such as adequate support for the students' academic needs, including remediation support. More often than not, students are blamed for their own failures to succeed in universities, which serves further to increase their sense of academic inadequacy. I do believe that everyone is entitled to the opportunity to access higher education, but I do not believe that higher education is the only path, or the path for everyone, to career success.

My values in education and learning in general have evolved over the years: from purely utilitarian, such as a pathway to a good career outcome, to benefits that cannot necessarily be measured tangibly (that it is a journey of continuous personal development and improvement that has no end), that continuously challenge how I think, what my values are, and who I am. Therefore, my identity can be said to be in a constant flux of on-going evolution. *de Lauretis* (1984) described a researcher's subjectivity as "....an ongoing construction..... Thus, it is produced not by external ideas, values or material causes, but by one's personal, subjective engagement in the practices, discourses, and institutions that lend significance (value, meaning, affect) to the events of the world" (p.159).

As an educator, I do believe that the best gift I can bestow on my students is to teach them how to learn on their own, so that they can become lifelong learners. My motivation for this thesis was also driven by my belief in personal agency and my interest in learning more about how to help students gain control over their own learning through efficacy beliefs development. The idea that perceived self-efficacy precedes motivation is compelling – in that, unless one believes that one has the capability of being successful with something, one is less likely to attempt it. My father used to tell me as a child that “*the battle between success and failure is first fought and won in your head*”. According to Bandura (1994), people who doubt their abilities are more likely to be weak in commitment and low in aspirations in goal pursuits, and they are more susceptible to failures and adversities which further diminish their efficacy beliefs.

My work in higher education has mainly been involved with students who would not necessarily have chosen to pursue higher education if it were not for their parents and current societal expectations, whereby a bachelor's degree is often the base level education entry criteria for many professions. My thesis was initially motivated by eleven years (2000-2011) of work in China where I have established two joint venture international hotel management programmes with two tertiary level vocational institutes on behalf of an Australian Higher Education Institute. During this period, I learnt that there were many students who either felt inadequate with their ability to cope with their studies or took their education seriously because they do not believe they have the capability as a result of their previous high school learning experiences. In China, students who failed their *Zhong Gao* and had to take a default VE pathway often feel stigmatised as this limits their upward mobility in society. Hence

the idea that if we could understand the sources of self-efficacy development, then educators could help their students develop their belief in their academic ability and perhaps even increase their general self-belief to fulfil their full potential.

During the period of this research, I was working as a Vice President and Project Manager at a private international university in Thailand where I established a similar joint-venture hotel management programme at a bachelor's degree level in 2012. Data collection was conducted on site in September of 2018, with permission and invitation from the participating institutions' authorities.



## GLOSSARY OF TERMS

**Academic Achievement** – refers to the ability to successfully complete and pass any educational activities that are curricular-based such as assignments, projects, tests, examinations and in this study, included practicum both at school and in industry.

**Academic Self-Efficacy** - Academic self-efficacy refers to one's perceived capability to perform given academic tasks at desired levels (Schunk, 1991), and in this instance, related to the participants programme of study.

**Asian Students** – in this study, students from countries in the continent of Asia.

**China** – This term refers to the People's Republic of China, including the Special Administration Regions (SAR) such as Hong Kong and Macau.

**Chinese Students** – refers to students from the People's Republic of China, including the Special Administration Regions (SAR), such as Hong Kong and Macau.

**Clean Verbatim** – refers to erroneous speech having been removed in the transcripts. For examples word such as *gonna*, *cause*, *dunno* are corrected to going to, because and don't know. Crutch words, stutters and filler words such as *you know*, *uh*, *um..* that do not add meaning or coherency to speech are omitted in the transcribing.

**Domain Specific Self-efficacy** – the study of self-efficacy in more narrowly defined areas such as academic achievement, quitting smoking, sports performance, language, mathematics etc.

**East Asians** – in this study refers to Asian students from China and SAR, Korea, Japan, Taiwan, Singapore, Malaysia, Indo-China, Philippines and Indonesia.

**Gao Kao** –the national university entrance examination at the end of the senior secondary school education.

**General Self-efficacy (GSE)** – the general sense of self-belief one holds about one's capabilities to perform or cope with novel or difficult tasks and in the event of adversity.

**Higher Vocational Education (*gaodeng zhiye jiaoyu*)** – is technically categorised as a Technical and Vocational Education and Training (TVET) in China (Xiong, 2011). Higher vocational education (VE) is akin to the Polytechnics in the UK pre-1992.

**Perceived Self-efficacy (PSE) or efficacy belief(s) (EB)** – are defined as *“people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine how people feel, think, motivate themselves and behave.”* (Bandura, 1994, p.71). According to Bandura (1997) *“Perceived self-efficacy is not a measure of the skills one has but a belief about what one can do under different sets of conditions with whatever skills one possesses”* (p.37).

**Self-concept (SC)** – defined in very broad terms as a person's perception of himself/herself (Shavelson, Hubner, and Stanton, 1976).

**Self-confidence** – the term self-confidence is used only to reflect the strength of certainty of a performance or a perception (Merkle & Van Zandt, 2006).

**Self-efficacy vs Confidence** - according to Bandura (1997), *“the construct of self-efficacy differs from the colloquial term confidence.... and confidence reflects only strength of certainty about a performance or perception* (Bandura, 1997, p. 382).’

**Self-enhancement** – is taking a biased positive view about oneself.

**Social Cognitive Theory (SCT)** – refers to Bandura's social cognitive theory developed in 1977 from the Social Learning Theory (SLT). Bandura postulates that learning develops in a social context and with reciprocal interactions between the individual, the environment and performance/behaviour. The emphasis of SCT is on

social influence, including internal and external social reinforcement. A major construct for this SCT is efficacy beliefs.

**Vocational Education (VE)** – is known generally as vocational education and training (VET) in China and defined “*as technical education and skills training mainly for jobs that are based on manual or practical activities*” (Hao, 2012, p.4).

**Zhong Kao** - Middle School (equivalent to Junior High) national examination in China, taken at the end of their first two years of high school, to determine according to their examination results, which education pathway the graduates will take to continue their high school education.

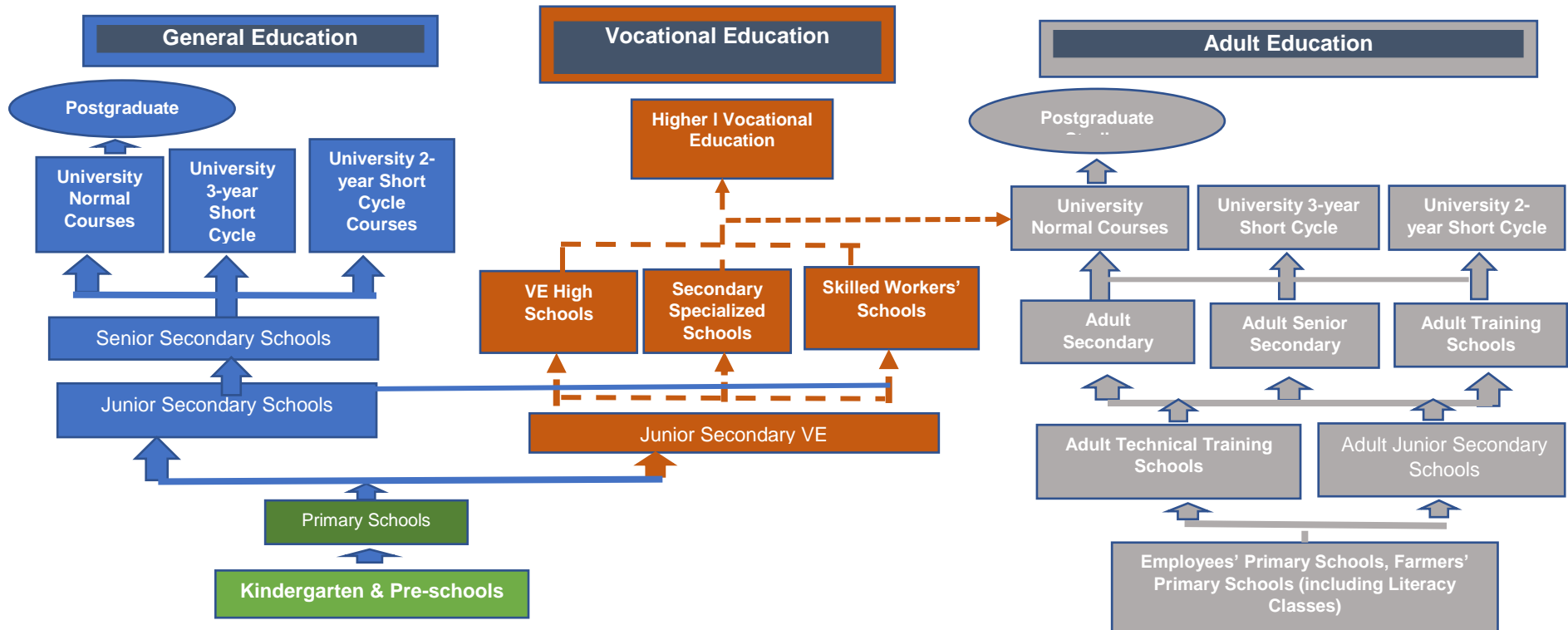
## **1.0 CHAPTER ONE - INTRODUCTION**

The higher education (HE) system in China has experienced rapid growth over the past four decades to become the largest HE system in the world (Altbach, 2014). In 1978, a mere 1.5% of the age cohort were enrolled in HE. This has grown to twenty percent by 2010 and, according to MoE (2010), by 2020 forty percent of the age cohort is expected to be enrolled in HE. Within this context vocational education has continued to grow, but still lags behind as a result of lack of recognition for its importance to the nation's skilled workforce and economy (Stewart, 2015). In 2016, there were over 12,300 VE institutions at combined junior to secondary and tertiary levels, with over 36 million students in junior to secondary VE and over 10 million students in higher VE. In addition, there are also 93,000 skilled workers schools (see Figure 1.1) with over 100 million students undertaking training courses annually (MOE, 2017). VE in China is provided through stand-alone secondary schools and tertiary and higher VE institutions instead of through vocational courses within general high schools or community colleges.

### **1.1 Education Context - Overview China's Education System and Vocational Education Sector**

Figure 1.1 shows the current education structure in China displaying three major pathways, two of which are standard education pathways from kindergarten to tertiary university or college education, whilst the third pathway is catering for adult education. The focus of this study is on students on the VE pathway.

**Figure 1-1 Structure of Education System in China** (adapted from Guo & Lamb, 2010)



**Table 1-1 China's Education System Organisation (adapted from OECD (2015) OECD Economic Surveys: China, p.98).**

EDUCATION	SCHOOL LEVEL	AGE	NOMINAL NUMBER OF YEARS OF SCHOOLING	NOTES
HIGHER EDUCATION	PhD PROGRAMME	FROM 25-27 YEARS	3 OR MORE	Pre-requisite for admission is a master's degree. A combined master's/doctoral program in which students are directly admitted to the doctoral programs upon completing the master's program is possible in China. Candidates on combined master's/doctoral programmes will receive a master's degree but will receive a doctoral degree on successful completion. This program is known as <i>shuobo liandu</i> (硕博连读) in China.
HIGHER EDUCATION	MASTER'S PROGRAMME	FROM 22-24 YEARS	2 to 3 years depending on field of study	Candidates may not be older than 35 years of age. This level of study is known as <i>shuoshi xuewei</i> (硕士学位) in China.
HIGHER EDUCATION	UNIVERSITY (BACHELOR'S DEGREE) AND HIGHER VOCATIONAL EDUCATION	FROM 18 – 21 YEARS	4 to 5 years depending on field of study	This level of study is known as <i>xueshi xuewei</i> (学士学位) in China.
SECONDARY	SENIOR SECONDARY SCHOOL	FROM 15 – 17 YEARS	3	On successful completion of junior high or middle school, students are streamed according to their Middle School Exam results (Zhong Gao) into normal (academic) senior secondary school or vocational senior secondary school. Vocational senior secondary programs last 3 or 4 years. Senior secondary school is known as <i>gaozhong</i> (高中) and vocational secondary school is known as <i>Zhongzhuan</i> (中专) in China.
SECONDARY	JUNIOR SECONDARY SCHOOL	FROM 12 – 14 YEARS	3	This level of schooling is known as <i>chuzhong</i> (初中) in China.
PRIMARY	PRIMARY SCHOOL	FROM 6 – 11 YEARS	6	Compulsory education for all children
PRE-SCHOOL	PRE-SCHOOL AND KINDERGARTEN	FROM 3 – 5 YEARS	3	

Source: OECD (2015), OECD Economic Surveys: China - Providing the right skills to all, p.98. OECD Publishing, Paris, [http://dx.doi.org/10.1787/eco\\_surveys-chn-2015-en](http://dx.doi.org/10.1787/eco_surveys-chn-2015-en)

Under the current Chinese Education System, students will undertake a national Senior High School Entrance Examination known as *Zhongkao* after completing three years of junior high school or middle school. The scores from this examination will determine whether the student is eligible to gain admission into senior high or secondary school with opportunities for university studies. This is the preferred education pathway aspired to by Chinese students and parents but, if they fail to achieve the minimum base score for senior high school admission, they may choose to repeat the junior high school year to retake the *Zhongkao* or choose to attend any of the secondary VE schools or pursue private school education – locally or abroad - if they have the financial provision.

The Chinese examination system stemmed from the imperial examination, also known as the imperial civil service examination, started in 597 AD during the Sui Dynasty which lasted for some one hundred and thirty decades (1300 years) (Li & Dai, 2009; Zhang, 1996), and was a means for lay citizens in ancient China to gain a civil service post, which also meant upward social class mobility (Crozier, 2002). Although this examination system was abolished in 1905 during the Qing Dynasty, the influence prevails, and examinations are still regarded as of great importance in China (Wu, 2015).

## **1.2 Problem Statement**

This system of streaming students into senior high school or vocational high school through examination at the *Zhongkao* level, although not a practice unique to China, unfortunately creates an environment whereby students who failed to make the grade into senior secondary school feel somewhat inadequate. This is because

admission into senior secondary school also meant the opportunity to enter university on successful completion of the university entrance examination or *Gaokao*. This situation serves to undermine their academic efficacy beliefs (EB) as they feel that they are not 'good enough' or are 'lazy' students because they did not invest enough effort to achieve the necessary baseline score. Academic achievement also represents the main pathway to economic mobility in Chinese society (Chen, X., Chen, H., Kaspar & Noh, 2000; Li, Ang, & Lee 2008). Furthermore, the highly competitive examination systems characteristic of the Chinese education system, that tends to produce many failed experiences in the general student population (Chen et al., 2000), is coupled with high cultural expectation of students to be academically accomplished, thus producing an environment that is conducive to undermining students' EB (Ho & Hau, 2010).

A recent study of SE in the PRC by Cohen et al. (2015) found that there was a significant association between low academic self-efficacy and depression in adolescents, confirming that Chinese adolescents face extraordinary pressure to achieve academically, as well as highlighting the importance of the effects of academic self-efficacy in the Chinese context. According to a report by Stewart (2015) on China's Vocational Education System, VE students often feel stigmatised as not only is VE still considered as a second-class education and a fall-back for students who failed admission to normal senior high schools (Klorer & Stepan, 2015), but VE traditionally leads to jobs that offer little or no opportunities for advancement, as they are generally taught by teachers with little to no experience in the industry (Stewart, 2015). Although the quality of VE teachers has improved greatly since China's education reform began, unfortunately with the new phase of



expansion in VE, the current teacher resources in VE were unable to adapt and meet the new and higher demands (Kuang, 2014). Klorer and Stepan (2015) reported that

*“In many areas, China’s VET system is in a dire state. In society it is regarded as a fall back for those who failed their exams and a second-class education. For many years, vocational training was politically and financially neglected in favour of university expansion. When it was the “world’s extended workbench” China had little need for skilled workers. Unskilled workers had been perfectly satisfactory for jobs in factories. Now there is need for a radical turnaround. The number of unskilled workers being replaced by industrial robots is increasing rapidly.” (p.4)*

Furthermore, Stewart’s (2015) report on VE students’ general lack of competency and career goals were also consistent with research findings by Jiang & Zhang (2012) on academic interest and goals of Chinese junior high vocational students. Their study found that VE students have faced frequent failures in their learning experiences and that not only do they lack efficacy beliefs in their capabilities, but they are also unsure of, or do not have, any academic goals and expectations.

In education, academic achievement is a major concern for students, educators, parents, and institutions and hence remains a key focus of education research. Educators are most concerned with the development of students’ skills and knowledge, to equip them with the tools of success; however, the beliefs that students hold on to, whether they are able to learn and use these tools could differentiate between success and failure. In an interview with Bembenutty (2007), the late Professor of Educational Psychology and self-efficacy researcher Frank

Pajares said, *"We are, to a very great extent, the very beliefs we carry inside our heads"* (p.665). For example, more prevalent than ever, we can witness the power of beliefs held by political leaders, politicians, political activists, entrepreneurs, religious leaders and followers, acted out on television and other news media. People's beliefs may vary in their perceived truth or value (Preston & Epley, 2005), but there is little doubt our beliefs play a crucial role in shaping our behaviour.

It has been forty years since Albert Bandura, renowned Professor of Social Science in Psychology at Stanford University, first introduced his self-efficacy theory (SET) in 1977. This theory has attracted much research interest in almost every domain of social science (Klassen and Usher, 2010). Bandura (1997) explained that "self-efficacy theory acknowledges the diversity of human capabilities. Thus, it treats the efficacy belief system not as an omnibus trait but as a differentiated set of self-beliefs linked to distinct realms of functioning" (p.36). He argued that beliefs in one's own ability constitute the major aspect of human agency because, if people do not believe they have the ability to achieve the results, they will not even attempt to make it happen. Bandura (1997), referred to people's beliefs in their capabilities as perceived self-efficacy (PSE) and emphasised that "perceived self-efficacy is not a measure of the skills one has but a belief about what one can do under different sets of conditions with whatever skills one possesses" (p. 37). The SET is grounded within a larger theoretical framework of Bandura's (1977) Social Cognitive Theory (SCT). This theoretical framework posits that human achievements are the results of interactions between one's behaviours, personal factors and environmental circumstances, and people learn by drawing information from four main sources, namely their actual performance, vicarious experiences such as modelled behavior

by others or self, encouragement provided by our social community and their physiological and emotional states (Bandura, 1997).

Since Bandura first introduced his SET, researchers have been very successful in demonstrating that the beliefs individuals hold about their PSE have a powerful influence on their attainments in diverse fields. PSE has been especially prominent in studies of educational constructs such as academic achievement (Pajares & Schunk, 2001 and Urdan & Pajares, 2006); self-regulation and goal setting (Zimmerman, 2002; Zimmerman & Cleary, 2006); career development (Bandura, Barbaranelli, Caprara & Pastorelli, 2001; Lent, Brown & Hackett, 1994; Lent, Brown & Larkin, 1986), and teaching and teacher education (Tschannen-Moran & Barr, 2004; Tschannen-Moran & Hoy, 2001). According to Pajares (2002):

*“In general, researchers have established that self-efficacy beliefs and behavior changes and outcomes are highly correlated, and that self-efficacy is an excellent predictor of behavior.”* (para. 34)

PSE also operates at three different levels in controlling and monitoring one's own learning to effect academic attainment: and the achievement in academic endeavours in turn impacts on one's aspirations, degree of motivation and academic achievements (Bandura, 1993). This makes PSE desirable in the development and improvement of positive EB to help students maximise their academic potential.

### **1.3 Purpose of Study**

The purpose of this study is to gain understanding of the sources of self-efficacy of Chinese students in the higher vocational education pathway (see Figure 1.1) to inform and improve VE practices. Bandura's SET (Bandura 1997) will form

the major theoretical framework to guide the research process. This study is guided by the following research questions.

### **1.3.1 Research Questions**

- A. What are their self-reported PSE and their sources of self-efficacy?
- B. Are the self-reported sources of self-efficacy consistent with Bandura's (1997) four hypothesised sources of self-efficacy, namely: mastery, vicarious experience, social encouragement and physiological and emotional status, or are there other self-reported sources of self-efficacy identified?
- C. What cultural value/s do the Chinese students hold about learning and academic achievement, and how might they be perceived to impact on the students' academic PSE development?
- D. How do the students select, weight and integrate sources of self-efficacy information into their PSE judgements?

## **1.4 Context of Study**

The context of this study is the Sino-Australian Joint Venture (SAJV) campus located in Suzhou – eastern China. To protect the identity of the two institutions involved, the Chinese institution will be referred to as XTFI and the Australian institution will be referred to as TUBM. XTFI is a tertiary VET institution that offers five-year vocational diploma programmes in a range of specialisation in tourism, hospitality or finance. The students at XTFI are admitted after their junior high or middle school state examination. This is when they are streamed by the provincial education bureau into academic senior high school or vocational high school according to their examination results. Their eligibility for admission into specific schools will further depend on the entry criteria of the individual schools. Generally,

the higher the reputation and school ranking, the more demanding the admission criteria will be. Students who progress to academic senior high school will have opportunities to progress to university studies, whilst students who progress to vocational high school generally do not progress to university studies unless they could afford to study at any private universities or higher education institutions (Stewart, 2015). On the other hand, the Australian partner institute is a private higher education institute offering business degrees at undergraduate and postgraduate levels with majors in various aspects of hotels, resort, restaurants and events management. Their partnership with XTFI allows them to offer the first two years of their undergraduate business degree program majoring in international hotel and resort management at XTFI as part of their five-year tertiary vocational programme in hotel management. This five-year joint-venture programme adopts the '*grafting*' model of operation whereby both the Chinese and foreign parties maintain their own models of teaching and course delivery. This includes mutual acknowledgement of curricula and institution's credits. References to "2+2," "3+1", and "3+2" programmes generally fall into the 'Grafting' model (Zhang, 2014). The first number refers to the number of years of studies on the Chinese institution's program, whilst the second number denotes the number of years of studies on the foreign partner's programme, either in China or overseas. In other words, a "2+2" programme denotes two-years studies on the Chinese programme followed by two years of studies on the foreign partners' programme (either in China or abroad).

This joint-programme is a 3+2 comprising of three years' vocational secondary level delivered by XTFI faculty, followed by two years' associate degree level delivered by joint TUBM and XTFI faculty. The first three years of the

programme are delivered in Chinese (Mandarin) and administered wholly by XTFL, whilst the final two years are delivered in English and administered by TUBM - to meet Australian standards of quality assurance. Upon successful completion of the five-year joint-programme, the graduates will be awarded both Chinese and Australian diplomas. Thereafter, the graduates have the option to continue their studies in Australia at the TUBM's campus to further their studies to a bachelor's degree and masters' degree, or enter the workforce with upward career mobility prospects to management positions.

Therefore this Sino – Australian Joint-Venture Programme (SAJVP) offers their students not only the opportunity to gain access to higher vocational education through a direct pathway from secondary vocational education, but at the same time provides opportunities to further their studies for a university degree, or obtain employment with career mobility. These students are also privy to both Chinese and Australian systems of education and their participation in this study afford the opportunity to gain insight how they cope with their studies within both their Chinese and western learning environments.

## **1.5 Significance of Study**

According to Klorer and Stepan (2015) and Zhao (2016), the Chinese government has recognised VE as a weak link in the education system, as an educated workforce is linked to the economic prosperity of the nation. VE in China is considered as the 'Achilles heel' of the Chinese economic model restructuring because this model, with its "Made in China 2025" strategy (cited in Klorer & Stepan, 2015) is reliant on a highly skilled workforce to transform the nation into one that is

industrially innovative (Klorer & Stepan, 2015). Furthermore, the unveiling of China's aim to become an industrial Superpower by 2049 in the State Council 13<sup>th</sup> Five-Year Plan (Central Committee of the Communist Party of China, 2015) put enormous pressure on both the VE system and industry to bring about this aim. However, macro visions of government cannot be realised if VE intuitions and their educators are unable to address concerns at a micro level such as those of students' efficacy beliefs and academic achievement.

The findings are intended to not only contribute new knowledge to the existing body of work accumulated over the past four decades on efficacy beliefs research, but also benefit the educational communities who are interested in human motivation and behaviour: especially in how PSE influences Chinese students' achievements. The understanding of sources of PSE development can assist educators in helping students capitalise on efficacy-relevant information through course design, teaching strategies, counselling approach and intervention program designs. Sources of EB development studies such as this one can also help educators enrich their students' thinking habits: such as their predispositions and preconceptions about their academic self-concepts, education, self-evaluation of their own learning, and psychological well-being.

## **1.6 Summary**

This chapter provided an overview of this research, outlining the research problem as the lack of academic self-efficacy issues faced by Chinese students in VE. The purpose of this study is to understand the development of efficacy beliefs in a vocational education setting and, in doing so, also try to fill gaps in the literature

that could benefit educators in developing intervention programs and strategies to enhance efficacy beliefs development. The SET framework was briefly discussed along with the VE context to set the background of this study.



## 2.0 CHAPTER TWO – LITERATURE REVIEW

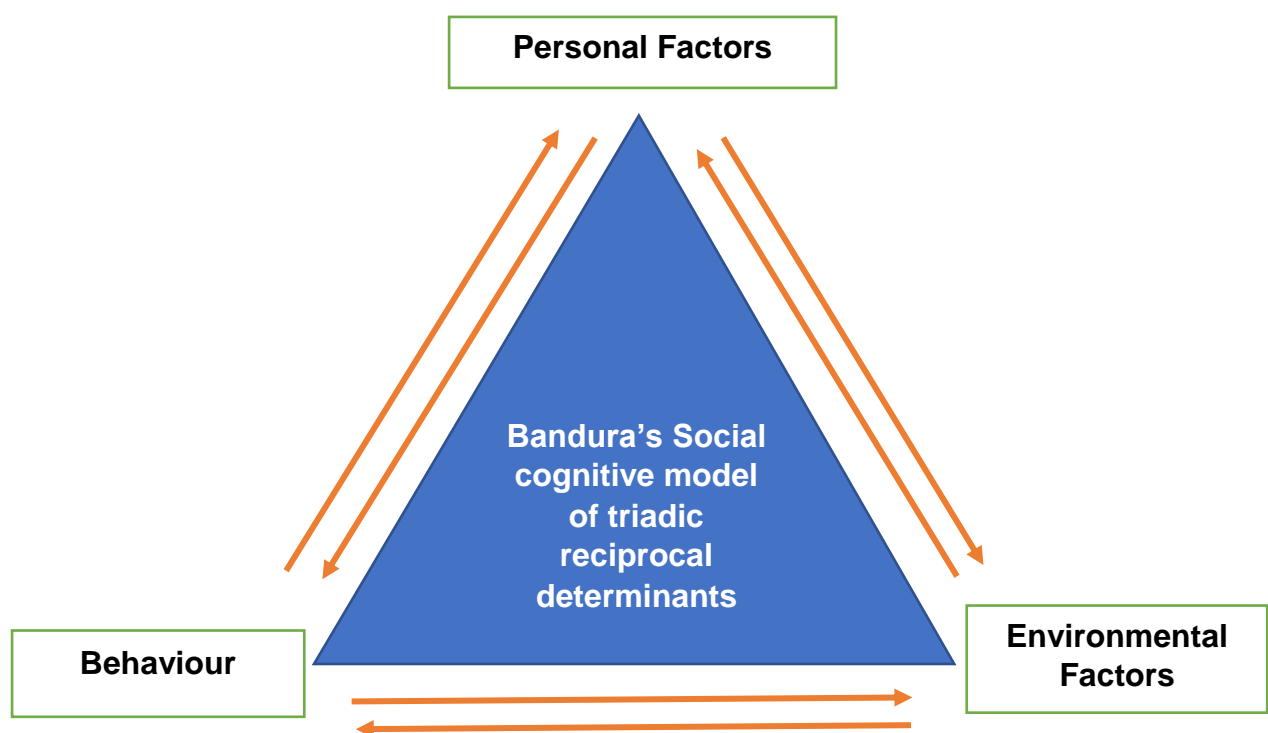
The focused this chapter is on the literature of existing research and discourse related to this study. The review of the literature highlights debates related to the problem in this study and informed the development of the research questions. Since the problem of this research is centred on Bandura's self-efficacy theory (SET) (1997), it also forms the main theoretical framework for this study. According to Kwan et al. (2010), research on self-efficacy and sources of self-efficacy is still relatively new and limited in Chinese society even to this day. Hence literature regarding academic settings and from other cultural contexts, especially those pertaining to sources of efficacy beliefs, are also reviewed and analysed to provide some foundation in understanding the influences of EB development or enhancement. Klassen and Usher (2010) cautioned that the terms efficacy and self-efficacy are different in meaning and that some researchers have used them interchangeably and this is an incorrect practice. They defined the term efficacy as "the capacity or power to produce a desired effect" (p.10), whereas Bandura (1977) used the term 'self-efficacy' to denote a person's belief in their efficacy, competence or capabilities. Klassen and Usher (2010) highlighted that the terms 'efficacy beliefs, perceived self-efficacy and collective efficacy beliefs' are appropriate or correct according to Bandura's (1977) definition of self-efficacy. In this study, the terms *efficacy beliefs* (EB) and *perceived self-efficacy* (PSE) are used to refer to one's beliefs in one's abilities. The term self-belief is also used to refer to one's efficacy beliefs as this was a term that the Chinese participants could relate to.

## 2.1 Theoretical Framework

SET was developed on the principle that cognitive processes are brought about and changed by the experience of desired outcomes (Bandura, 1977). This theory is grounded within Bandura's social cognitive theory (SCT) that holds the perspective that individuals are endowed with abilities that define them as human beings such as; the ability to symbolize, exercise foresight, self-regulation, introspection, learning through observations, which provide people with the influential intellectual abilities to self-determine. Bandura's SCT (1977) differs clearly from other self-theories in that it focuses on human agency. According to Bandura (1997), it would be difficult to try to explain the complexities of human behaviour with a psychology that is void of self-reflection (Bandura, 1997). Although Bandura's SCT acknowledges evolutionary impacts in human adaptation and transformation, it does not agree with the evolutionary perspectives of social behaviour as a creation of evolutionary science. This is because these views fail to explain how social and technological advancement leads to the creation of new environmental selection demands for adaptability and impacts on biological evolution (Bussey & Bandura, 1999). Furthermore, Bandura (1986a) contended that "*a theory that denies that thoughts can regulate actions does not lend itself readily to the explanation of complex human behaviour*" (p.15). Conversely, Bandura's SCT advocates a two-way effect whereby evolutionary forces change human development so that humans are more adaptive and even learn to construct increasingly complex innovative environments. According to Bussey and Bandura (1999), this in turn creates "*new selection pressures for the evolution of specialised biological systems for functional consciousness, thought, language and symbolic communication*" (p.683).

**Figure 2.1** shows the theoretical perception that human functioning is the result of an active interaction of personal, behavioural and environmental stimuli; such as the way individuals make sense of the outcomes of their actions informs and changes their environment and personal factors that inform and influence future actions.

**Figure 2-1 Bandura's Social Cognitive Model of Triadic Determinants**



*Adapted from Bandura (2011, p.359)*

The symbiotic nature of the influential factors of human functioning in Bandura's (1977) SCT model allows intervention strategies to be focused at the personal, environmental or behavioural level. For example, educators/teachers can use this framework to design and implement intervention strategies to improve; students' EB (personal factors), learning and self-regulatory habits (behavioural factors), and the school and classroom environment (environment factors). The

understanding of how the Chinese participants interact and respond through their learning experiences could provide insight to educators/teachers to assist them in their practices.

### **2.1.1 Perceived Self-Efficacy (PSE)**

PSE is defined as “*people’s beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine how people feel, think, motivate themselves and behave.*” (Bandura, 1994, p. 71). According to Bandura (1997), “*perceived self-efficacy is not a measure of the skills one has but a belief about what one can do under different sets of conditions with whatever skills one possesses*” (p.37).

According to Pajares (1996), Zimmerman (2000) and Zimmerman and Martinez-Pons (1990), this PSE functions as an important predictor of a person’s motivation, emotion and behaviour. In education, research found that PSE influences students’ motivation, self-regulation and academic achievements. For example, when students believe that they can perform well in their endeavours, they are more motivated, work harder and when faced with challenges and difficulties, they would persevere (Klassen & Usher, 2010; Pajares & Schunk, 2001; Zimmerman, 2000).

Bandura’ (1977) SET is considered by many social and behavioural science researchers to be a significant theoretical contribution to their work in a diverse range of human behaviour. In the education domain, it is a major influence on the study of academic achievement, motivation and learning (Pajares, 1996; Schunk & Pajares, 2004; Schunk, 1991; Usher & Pajares, 2006a). Although the predictive

reliability of PSE in educational settings is now well recognised, studies on the understanding of how EBs are developed remains limited (Klassen & Usher, 2010; Usher, 2009; Usher & Pajares, 2006a). Therefore, the findings of this study will contribute to the existing body of knowledge to provide better insight into factors influencing, especially academic EB development.

Despite the global support gained by Bandura's (1977) SET since it was first published, critiques of the SET include the ambiguity of the SET theory and the methodology adopted by Bandura and his colleagues in the assessment of self-efficacy (Marziller & Eastman, 1984). According to Marziller and Eastman (1984), Bandura's definition of self-efficacy is ambiguous because in defining self-efficacy expectations independently of outcome expectations and consequently the emphasis placed on the outcome in any assessment of an individual's expectations of change in performance. Marziller & Eastman (1984) argued that both self-efficacy and outcome expectations are

*"..... important in determining change, and ..... further argued that it is impossible to exclude considerations of outcome from any assessment of personal self-efficacy" (p. 258)...*

Their argument points to Bandura's failure to provide any clear definition of what constitutes a task and what constitutes an outcome as they believe that a task cannot be defined without some reference to outcome and that outcome expectations may affect future performance significantly regardless of an individual's EB. A critical point in Bandura's (1982, 1986b, 1986c, 1995, 1997, 2007) rebuttals to these critiques was the concession that it is possible for outcome expectancies to influence PSE levels but emphasised that this does not necessarily invalidate one's PSE judgments.

### **2.1.2 Sources of Self-efficacy**

‘Sources of self-efficacy’ refers to the underlying sources of EB development which they influence the development or changes in a person’s EB. The four primary sources of self-efficacy purported by Bandura (1997) are: i) mastery performance experience; ii) vicarious experience; iii) verbal and social encouragement; iv) physiological and emotional states. These sources of self-efficacy and their relationships to PSE have also been investigated and found to be correlated in studies conducted by Klassen (2004) and Lent, Lopez and Bieschke (1991).

According to Bandura (1997), our PSE forms a critical part of our self-knowledge and plays an important role in the judgement of our personal competence. Sources of self-efficacy, regardless of whether they are conveyed enactively, vicariously, persuasively or physiologically, are constantly being appraised and processed for their relevance to the judgement of our capabilities. They also only become useful through cognitive processing and through reflective thought (Bandura, 1997). This efficacy information can be influenced by a range of personal, social and situational factors, and the way in which they are cognitively understood. This cognitive processing includes two distinct functions. The first function pertains to the type of information individuals select and recognise as indicators of their personal efficacy. Each source of self-efficacy has its distinctive set of efficacy indicators and the number of sources of self-efficacy selected provides the basis upon which the self-evaluation process operates. The second function involves the heuristics that the individuals adopt to weight and integrate information from the sources of self-efficacy in the construction of their EB (Bandura, 1997). Therefore, this study endeavours to understand how these two cognitive processing

functions work for the participants to gain insight into how they attend to and use efficacy information indicators, and factors influencing their interpretations, selection and integration to construct their PSE.

#### **2.1.2.1 Mastery Performance Experience**

Mastery performance experience refers to successful past performance experiences that provide a measurement of our capabilities for future performances. According to Bandura (1997), experiences of success are the strongest source of self-efficacy. This is because they provide solid proof of whether one has what it takes to achieve success. As successes strengthen one's PSE level, failures also weaken it. SET maintains that repeated failures are most likely to have the most detrimental impact, particularly if these failures cannot be attributed to insufficient effort or other extenuating reasons. Individuals who have already developed high PSE through past mastery experiences are also less affected by failures. Furthermore, achievements attained under adverse circumstances or with great difficulties are especially beneficial in EB enhancement.

There are numerous studies reporting students' mastery performance experiences as predictive of their PSE levels across domains in science, mathematics, general academic study, writing, self-regulation, as well as across-cultural groups. (Britner & Pajares, 2006; Klassen, 2004; Lent et al., 1991; Lopez & Lent, 1992; Lopez et al., 1997; Pajares et al., 2007; Usher & Pajares, 2006a, 2006b). These studies confirmed that mastery performances or successful experiences strengthen one's EB; while failures raise self-doubt in one's capabilities. Furthermore, their findings were also consistent with Bandura's (1997) SET's

premise that repeated failures may have the most negative effect on EB development if the individual has worked hard. Difficulty levels or challenging circumstances experienced in mastery experiences were also found to be important in the evaluation of PSE.

Longitudinal studies conducted by Elder and Liker (1982) on the impact of hardship during the Great Depression on the lives of women in later years, indicated that the hardship experienced had a more profound and lasting impact on their emotional health than their physical health or cognitive abilities. Their research showed that these women who faced tremendous hardship were more self-confident and happier in their old age than their counterparts who did not experience any deprivation or faced minimal hardship. Hardship faced by these women seemed to have helped them develop a stronger sense of resolve, whereby they were less affected by the limitations and challenges of living, as well as being less vulnerable to problems and setbacks in life. As VE students in China have faced frequent failure experiences as a result of the Chinese competitive examination systems, despite their reported low level of PSE, could these 'hardship' experience have developed in them a stronger sense of resolve? In this study, the interviews will address how the participants cope with academic challenges and adversities.

PSE has also been often conceptualised as a situation-specific belief; however, according to Bandura, Adams and Beyer (1977) and Bandura (1986a), a high PSE levels developed in one domain may transfer to other domains, creating a general sense of PSE. For example, individuals with much-varied mastery or successful experiences may be expected to have high levels of PSE in a wider



variety of settings than individuals with limited experiences of success and failure. Bandura (1977) suggested that the context in which mastery performances were experienced, and whether the individual attributed the success to chance or skill, will determine the extent in which these mastery experiences influence and the level of EB enhancement. These propositions suggest the strength of one's PSE differs as a result of one's experiences with achievement and failure in different contexts. These past experiences subsequently impact on general outcome expectancies that individuals take with them into new situations. For example, although the VE students in China may have failed to qualify for admission into normal senior high school as a result of their *Zhongkao* examination scores, this does not mean that they have not experienced successes in their academic or other endeavours. The focus of the *Zhongkao* examinations is basically three key subjects - Chinese, Mathematics and English - and their qualifying benchmarks are based on established minimum scores by the provincial education bureau (Hannum, An, & Cherng, 2011). Based on Bandura's postulations above, it is possible that the VE students related to this study may lack efficacy beliefs in one or any of these subjects, but may have developed higher levels of PSE in other capabilities, albeit in the academic domain or otherwise. In this study, the participant's academic strengths and weakness were explored to gain insight into whether high efficacy beliefs in one or more domains may be transferred to encourage them to persist with domains that they have low levels of PSE in.

#### **2.1.2.2 Vicarious Experience**

Vicarious experience refers to one's efficacy appraisals that are mediated through modelled experiences. Bandura (1997) suggested that modelling may be

facilitated in a number of ways such as; a) effective actual modelling, such as observing another student perform a classroom activity; b) symbolic modelling, such as watching other students performing effective classroom activities on television or other visual media; c) self-modelling, such as watching one's own videotaped classroom activities and reflecting and self-evaluating the performances; d) cognitive self-modelling, such as students mentally visualising themselves perform a classroom activity successfully.

Studies by Bandura (1982) and Schunk, Hanson and Cox (1987) found that symbolic modelling through social comparative inference is more effective when the other person is similar in capabilities, as this conveys to the observer that he/she too could efficiently perform similar activities. However, studies by Brown and Inouye (1978), and Schunk (1987), found contradictory findings in that, when individuals with similar capabilities as the model attempted the same activity and failed, despite high effort, their EBs were undermined. Conditions in which EB appraisals appear to be particularly sensitive to vicarious experience are when the level of uncertainty in one's competence in the given activity is high, especially when there is little to no prior knowledge or experience of the activity to make an appraisal of potential ability. In a series of studies conducted by Takata and Takata (1976) with Japanese students on social comparison process, their findings indicated that the individuals relied more heavily on vicarious information when they were more uncertain of their abilities in performing specific tasks. Furthermore, previous quantitative research on the relationship between vicarious experience and PSE found inconsistent correlations (from .09 to .58 [median  $r=.34$ ]) between vicarious experience and PSE (Lent, Lopez & Bieschke, 1991; Lopez & Lent, 1992; Matsui, T., Matsui, K., &

Ohnishi, 1990; Stevens, Wang, Olivárez & Hamman, 2007). Studies conducted by Gainor and Lent, (1998), Lent et al. (1991), Pajares, Johnson and Usher (2007), and Usher & Pajares (2006b) also showed that vicarious experience was not predictive of PSE in multiple regression models that included other sources of EB hypothesised by Bandura (1997). However, there are also some studies that showed a significant relationship between vicarious experience and PSE, such as Hampton's (1998) study on students with learning disabilities, and Klassen's (2004) study with students of Indo-Canadian descent. Usher & Pajares (2006b) also found vicarious experience to be predictive of academic and self-regulatory EB, with Grade 6 males, students in advanced reading classes above their grade level, and the academic PSE of Caucasian American, but not African American, Middle School students (Usher & Pajares, 2006a). In a qualitative study of women's achievement in science, technology, engineering and maths (STEM), Zeldin and Pajares (2000) found that exposure to competent models was effective in enhancing the participants' EB in the pursuit of careers in the mathematics, science and technology domains. The inconsistency of vicarious experience as a source of EB across studies indicates both the difficulty that the researchers must have had in developing suitable instruments to measure it, as well as contextual factors that mediate the influence of this source of EB. However, it is also unclear whether contextual factors are specific to a sample or source measures adopted in the individual study. These findings indicate that measuring vicarious experience as a source of EB development, using instruments of measure, is complex. Moreover, one needs to take into consideration that our ideas of who we perceive as a competent model varies, including who we perceive as similar in capabilities to us.

Vicarious experience in the form of cognitive self-modelling or imaginal visualisation has also been reported by sports psychologists to be instrumental in enhancing athletes' self-efficacy (Feltz & Lirgg, 2001). Cognitive self-modelling or imaginal visualisation is considered as a form of vicarious experience as individuals can feel more confident when they can visualise themselves mastering increasing challenging activities (Bandura, 2007).

In this study, interviews were used for the collection of data. This offered the opportunity for the participants to tell their own stories about their learning experiences as well as allowing the researcher to acquire explanations for why sources of EB information were influential or not.

#### **2.1.2.3 Verbal or Social Persuasion**

This third source of EB information refers to the positive feedback or encouragement received from significant others, such as peers, friends, teachers, family members, colleagues, supervisors, superiors and other significant others. According to Bandura (1997), when significant others expressed their belief or faith in one's capabilities, especially when one is struggling with challenges or difficulties, it helps to sustain one's persistence with the task/s. However, he also highlighted that verbal persuasion on its own may not be effective in developing EBs that are enduring.

Studies by Schunk (1982), and Schunk and Cox (1986) also indicated that the most familiar form of verbal or social persuasion in the education setting would be feedback on students' coursework and classroom activities. Their research

showed that students provided with evaluative feedback that highlights their abilities experience enhanced PSE. More specifically, when students were given feedback that they have improved their competence through effort, this feedback was found to increase PSE more than when were they told that their progress showed that they have the potential for the activity concerned. According to Schunk (1984a), feedback on the student's ability in the early stages of any skills development was also found to have a more significant impact on their PSE. Other studies conducted by Schunk and Rice (1987), and Schunk (1983) also found that the more EB was raised within the students, the more effort they applied and the higher the competence attained. These studies also demonstrated that skills development alone was only partially useful, and that PSE was more effective in contributing to performance achievements. There are extensive debates on the effective use of feedback (Evans, 2013) and there seems to be a consensus that what is considered good feedback is varied, in addition to the lack of published evidence to support 'what works best' (Ball, 2010). Evans' (2013) study into 'what constitutes good feedback?' produced inconclusive, varied findings, and suggested there is a lack of consensus on the most effective feedback practices. It is also important to note that the effectiveness of verbal and social persuasion is not based on the technicalities of feedback practices, but rather on how the recipients interpret the feedback and how they integrate this interpretation of information into their PSE. Therefore, what teachers may consider as 'good feedback' may not necessarily be effective in the raising of EB in their students. Moreover, as Beaumont, O'Doherty and Shannon (2011) argued, the culture of feedback received at schools may differ greatly - especially in the case of high schools and college or universities. Similarly, these differences in feedback culture could be experienced in the Chinese VE context. In this study, the

types of verbal or social persuasion, and the effectiveness of verbal or social persuasion provided by significant others such as parents, teachers, friends, peers, and supervisor/managers were explored to gain understanding of factors of importance for this source of EB.

It should be noted that, when the requisite skills for the task performance were lacking, verbal or social persuasion alone cannot bridge the deficit (Bandura, 1997). In other words, merely telling someone they can do it does not make it believable. Verbal or social persuasions are more convincing when they are imparted through the presentation of endeavour, acquirable skills, including persuading the participant that he/she has the ability to learn skills, modelling how it is performed and structuring the steps needed to ensure initial success or mastery.

Apart from verbal or social persuasion by other such as peers, parents, teachers, supervisors/managers, this source of self-efficacy has also been reported in sports literature to include self-encouragement or self-talk. Chase, Magyar, & Drake (2005), Feltz & Magyar (2006), and Hatzigeorgiadis, Zourbanos, Goltsios, & Theodorakis (2008) found self-encouragement or self-talk to be a reliable source of self-efficacy in various physical activity domains. Research in the sports domains indicate that self-talk can be beneficial in regulating effort and enhance self-efficacy (Zinnser, Bunker & Williams, 2006), and can also be effective in controlling anxiety and prompting corrective actions (Hardy, Jones & Gould (1996).

This study explored the type of verbal or social persuasions that are effective as a source of EB enhancement, those provided by significant others such as parents, teachers, peers, classmates, friends, and industry supervisors/managers.

#### ***2.1.2.4 Physiological & Emotional Status***

This source of self-efficacy relates to the appraisal of one's competence through somatic information received through one's physiological or emotional status. According to Bandura (1997), how individuals read and respond to stressful situations reflect their judgment of their competence in the related activity. Consequently, individuals with a low sense of SE are prone to heightened levels of physical and emotional arousals in the operating domains in which they perceived themselves to be inefficacious. In contrast, individuals with high self-efficacy are not prone to, or likely to be perturbed by, the same raised level of physical and emotional arousals (Bandura, 1997). Individuals also vary in their susceptibility to dwelling on their physiological and emotional status. Studies by Carver and Scheier (1981) and Duval and Wicklund (1972) revealed that some individuals are quick to focus inwardly on their somatic states, while others are more externally oriented. Studies on university students' attention cues from external and internal sources in a physical exercise setting, conducted by Pennebaker and Lightner (1980), indicated that individuals who are less engrossed in activities around them are more disposed to channelling attention inwardly and noticing their stressful states and reacting to stressful situations: whilst those who are outwardly focused are less likely to dwell on their enervating physical conditions. Furthermore, the impact of physiological arousal may also vary from situation to situation and the meaning attached to each case. For example, a confident and well-prepared speaker may be sweating because the room

is hot, whilst another speaker may be sweating because he/she is feeling stressed about not knowing how his/her speech will pan out, and his/her lack of PSE in public speaking. Therefore, one should keep in mind that it is not the level of emotional and physical reaction to a stressful situation that affects one's PSE. Instead, it is dependent on how the individuals concerned perceive and interpret these situations. For example, some individuals may find that physical and emotional arousal are beneficial in intensifying concentration on the task through the increased production of adrenalin, while others may find the same physiological and emotive state debilitating to their performance (Bandura, 1997). This study investigated how physiological and emotional status affected the participants' performance and PSE from their own learning experiences, and how they cope with any negative effects.

Finally, although Bandura (1997) focused on four hypothesised sources, he suggested that other critical psychological processes may be at work in the formation of EB. Pajares (1996) also counselled researchers to "*seek to identify sources of academic self-efficacy information other than those typically used*" (p. 565). Therefore, this study also explored other possible sources of self-efficacy that contribute to EBs enhancement amongst the participants.

### **2.1.3 Limitations of Research on Sources of Self-Efficacy**

According to Usher & Pajares (2008), the "the greatest limitation of research conducted on the sources is the manner in which they have been measured" (p.781). They highlighted that the quantitative measures used in many of the studies so far should be viewed with caution as they found inconsistencies across studies in the items of measurements used that are inconsistent with Bandura's (2006) guidelines



self-efficacy scale construction and/or Bandura's (1997) theoretical guidelines to measuring the sources of self-efficacy concerned. Usher & Pajares (2008) also found low reliabilities in the items of measurements used for vicarious experience and that high correlations reported between sources of self-efficacy indicated that there needs to be greater discrimination between the items used to measure the different sources of self-efficacy. The most problematic of all is that some of the items of measure used are incongruent with the hypothesized nature of the sources of self-efficacy and consequently the findings in these studies provided little information regarding their supposed influence. They argued that no matter how sophisticated any statistical test or analysis may be, it cannot inform the theoretical tenets unless the measures and operational definitions of constructs accurately reflect those tenets. In light of the problematic measurements plaguing the quantitative inquiries of self-efficacy and sources of self-efficacy (Klassen & Usher, 2010 and Usher & Pajares, 2008), there are suggestions that the adoption of qualitative approaches have the potential to offer rich answers to the development of PSE. Usher & Pajares (2008) argued that,

*“Qualitative inquiry provides a phenomenological lens through which the development of efficacy beliefs can be viewed, and it can capture the personal, social, situational, and temporal conditions under which students cognitively process and appraise their beliefs and experiences” (p.784).*

## **2.2 Culture and Development of Self-Efficacy**

Oettingen (1995) described the development of one's EB as an intricate process of self-evaluation involving the selection, weighting, and assimilation of various information and sources. In this self-appraisal process, culture plays an

important role. According to Oettingen (1995), “*culture may affect not only the type of information provided by the various sources, but also which information is selected and how it is weighted and integrated into people's self-efficacy judgement*” (p.151). According to Oettingen (1995) there are several reasons why culture may have an important impact on the development of EBs. For example, the frequency of exposure to sources of efficacy that individuals experienced may differ from culture to culture; communication of relevant sources of self-efficacy may be made in a variety of ways across cultures; and the value weighting of each information sources of efficacy may vary across cultures. Oettingen (1995) argued that, as SET was constructed from fundamental principles of psychology and systems mutual to human agency, the beneficial values of high PSE could be assumed to be universal across cultures despite the varying self-evaluation processes across cultures. These postulations were derived from her comparative studies using Hofstede's (1984, 1991) and Triandis' (1989) cultural diversity dimensions to measure the PSE of young students from East and West Berlin, Moscow and Los Angeles. Although Oettingen's (1995) studies did not involve any Chinese students, the findings demonstrated that there are cross-cultural variations in how the same information sources of efficacy are experienced by individuals from varied cultural backgrounds.

Studies conducted by Ahn, Usher, Butz and Bong (2016) on cultural differences and sources of self-efficacy information also found that the participating students from the US rate themselves higher, not only on mathematics PSE but also other areas, than their counterparts in Korea or the Philippines. The US students measured highest PSE, whilst the Korean students rated themselves the lowest on all the self-reported measures except for anxiety, and vicarious experience from

peers. These findings indicated consistently low PSE levels amongst these two groups of East Asian students that could not be explained by lack of self-enhancement motive or strong self-improvement motives amongst collectivistic cultures. Instead, the findings suggested that the students in collectivistic cultures may rate themselves lower on the PSE scales to conform to their cultural norm to exhibit humility (Ahn et al., 2016). These cultural variances in PSE levels highlight the importance of investigating how the individuals rate their PSE for their academic performance and allowing the participants in this study to explain their self-reported EB.

Comparative cross-cultural research on PSE involving Chinese students from China and Hong Kong, and western counterparts in Canada and UK, also reported differences between Chinese and Western students (Salili, Lai & Leung, 2004; Rogers, 1998). Their findings showed that students from China and Hong Kong reported lower PSE than their western counterparts. The twenty-year trend report from TIMSS (Trends in International Mathematics and Science Study) and PIRLS (Progress in International Reading Literacy Study) (2016), found that students from high performing countries with predominantly ethnic Chinese students, such as Hong Kong, Chinese -Taipei, and Singapore, consistently reported lower self-efficacy in Mathematics than their western counterparts, yet outperform them in Mathematics performance. Similar performances were also reported by the 2012 Programme for International Student Assessment (PISA) global study which ranked students from Shanghai-China, Singapore, Hong Kong and Chinese Taipei amongst the top four performing countries in the world consecutively, in Mathematics, Reading and Science (OECD, 2014).

A review of recent literature has found that the paradox of low PSE and high performance is not necessarily typically associated with Chinese or East Asian students. Recent studies conducted by Talsma, Schuz & Norris (2019) with a group of first year psychology students in Australia on whether individual students' academic PSE levels align with their personal performance found that low achievers held higher PSE than their personal performance abilities, whilst high achievers underestimated their PSE. These findings indicated that there is a problem with the accuracy of PSE judgements for both groups of students especially at the overall subject/course level whereby over seventy percent of the participating students' indicated higher PSE than their actual performance. This study however did find that the students who held the most accurate PSE with their academic performance were the ones who were performing at the average level. This group of student represented twenty percent of the study cohort.

Although these paradoxes do not seem to support the predictive value of high self-efficacy and academic success, Talsma et al (2019) expressed concerns that the increasing practice of avoidance of providing negative feedback and constructive criticism in current education environment may have implications in enabling students maintain unrealistic self-efficacy beliefs. However, it is not common practice for Chinese teachers and parents to praise their students and off springs for their achievements (Salili & Hau, 1994). This is because Chinese believed that too frequent praising of the child and for trifling reasons may indulge and be harmful the child resilience development.

Hau and Ho (2010) suggested that the low PSE reported by Chinese students may be due to the highly competitive Chinese examination systems which produce ample failure experiences for the student population. Thus far, despite various postulations mentioned previously, there has been no conclusive evidence to the paradoxes. Moreover, these studies did not involve students from VE. Furthermore, having low PSE does not mean that one cannot improve or do better or try harder. According to Chen and Uttal (1988), Ho (1981) and Li (2001, 2002), the practice of self-cultivation or self-improvement is central to Chinese cultural values. According to Chen and Uttal (1988) and Hess, Chang and McDevitt (1987), Chinese students are also inculcated from childhood that achievements can only be attained through effort and persistence. Improving academic performances is therefore perceived as an endeavour that is within one's control. This belief perhaps also reflects the belief that ability is incremental and can be learnt.

### **2.3 Relationship of Concept of Ability and Perceived Self-Efficacy**

Many years of research have found that students' concept of ability plays a vital role in their academic motivation and attainment (Blackwell, Trzesniewski & Dweck, 2007; Dweck & Leggett, 1988; Hong, Chiu, Dweck, Lin & Wan, 1999; Robins & Pals, 2002). Dweck (2008), author of the book "*Mindset: The new psychology of success*", and her associates demonstrated that students' beliefs about whether abilities are innate and fixed, or incremental, influence not only their goal orientations, but also their beliefs about meaning of effort and failure, the investment

of effort and self-regulation on their studies, which ultimately influence their academic outcomes.

Dweck (2000) proposed two 'theories' on the concept or nature of ability (see Figure 2.2). She posited that some students adopt the view that ability or intelligence is fixed and called this the 'entity view of ability'. The alternate view adopted by some students is called the 'incremental view of ability'. Her studies found that students with an entity view tend to view abilities as traits that one possesses of variable quantities, and that they are a fixed status. They are also only inclined to show adaptive behaviours when coupled with high confidence. In contrast, the students with an incremental view of ability believe that abilities are incremental and acquirable within one's control.

Bandura and Dweck (1985), Dweck and Leggett (1988) and Nicholls (1984) argued that there are people who believe that ability is incremental and therefore acquirable through the development of new skills and knowledge. Subsequently, they pursue challenges that lend opportunities to increase their competencies. They take the view that mistakes or failures are a part of the learning development, and that mistakes or failures are lessons to be learnt. They are also less likely to be dissuaded by challenges or adversities. Abilities are valued as personal development and improvement, rather than how their achievements are compared to others. This concept of ability helps with the understanding of Chinese cultural value of self-improvement or self-cultivation suggested by Chen and Uttal (1988) and perhaps explains why Chinese students may hold low self-beliefs in their ability yet achieve

high academic success; as they believe that effort and persistence can yield success and subsequently enhance their confidence and self-beliefs.

These studies also found that the students who held an incremental view of ability tend to orientate towards learning goals, adopt more active self-regulation, and display more adaptive patterns of behaviour, regardless of their confidence level (Dweck & Master, 2008). In contrast, the students who believe that ability is fixed tend to orientate towards performance goals. Studies by Hong et al. (1999) also found that students with an incremental view of ability are willing to invest more effort, not only to manage their academic pursuits, but also to rectify any learning deficiencies.

**Figure 2.2 Self-Theories - Entity vs Incremental View of Ability (Dweck, 2000)**



Dweck's Entity vs Incremental Model (Dweck, 2000) is situated at the core of her social cognitive model and creates a 'meaning system' that highlights two separate motivational and developmental pathways. According to Dweck (2000), individuals who hold the belief that ability is fixed may be as capable and can achieve as well as those with an incremental belief of ability, but because of the way they view the nature of cognitive ability, it may have significant influence on their academic outcomes, especially in the face of difficult challenges and adversities. Research by Kim, Grant and Dweck (2000) found that individuals with an entity view of ability have a higher tendency to forfeit learning in preference for the opportunity to appear smart or avoid appearing dumb. Their study also found that, when students are requested to appraise abilities from performances that have improved or regressed, those with an entity view tend to weigh the preliminary result most heavily and judge the declining performance as indicating higher ability than the improving performance, both for themselves and others. In contrast, the students who hold an incremental view are more focused on the learning and tend to weigh the last performance most heavily, crediting more ability to a student who has improved than the one who has regressed. These findings indicate that one group's concept of ability emphasises mastery over time, whereas the other seems to place emphasis on the underlying ability from the initial performance. Therefore, understanding how the participants in this study regard their concept of ability can also provide insight into their attitudes towards skills deficit, effort investment and persistence which are mediating factors to mastery performance and subsequent EB enhancement.



Research conducted by Ommundson (2003) also found that the students who believed that ability is acquirable were more inclined to change strategies and intensify their efforts when faced with difficulties. They also adopted deeper processing than their entity view peers. The entity view students who performed poorly were also much less inclined than incremental view peers to take corrective actions to rectify deficiencies. In other words, there is substantial evidence indicating that individuals who believe that ability can be acquired are more likely to put forth the effort to achieve success, while those who believe that ability is innate and fixed are less inclined to exert much less effort to ensure their success.

Furthermore, Bandura (1997) argued that people's belief in their ability to regulate learning is of critical importance as,

*".... neither cognitive processing skills nor metacognitive skills will accomplish much if students cannot get themselves to do academic assignments. A strong sense of efficacy to regulate one's motivation and instructional activities undergirds belief in one's academic efficacy and aspirations" (p.231).*

In other words, knowledge of self-regulatory strategies is insufficient to ensure effective usage; students must also have the EB that they have the competence to employ the self-regulatory strategies effectively. Studies on students' PSE for self-regulation found high predictability of effective use of effort and self-regulatory strategies, as well as being associated with motivation and achievement, across academic domains such as mathematics, science, languages and arts as well as at all levels of education. (Bandura, Barbaranelli, Caprara & Pastorelli 1996, 2001;

Bandura, 1997; Bandura et al., 2003; Bong, 2001; Pajares, 2007; Zimmerman & Bandura, 1994).

The literature reviewed here indicated that the concepts of ability, self-regulation and PSE have a close interwoven relationship and that, unless individuals believe that they are empowered to make changes through their own actions, they will not mobilise themselves with the necessary effort and self-regulatory strategies. In addition, the literature revealed that the individual's self-regulation or effort investment are also influenced by his/her beliefs on whether one's ability is fixed or malleable.

## **2.4 Chinese Vocational Students and Academic Self-Concept**

In China, the community generally considers the academic achievements of VE students to be of lower value and inferior to that of university students (Ran & Chen, 2014). According to Zhang, Yuen and Chen (2015), this perception has a negative effect on VE students' PSE because of the stigmatisation of vocational students. Therefore, the review of literature on academic self-concept (SC) was considered necessary to try to understand the relationship between academic SC and performance.

Studies conducted by Yang, Arens and Watkins (2016) with Chinese VE students in mainland China into academic SC found that academic SC are perceived separately with competence and affective components. For example, a student may have a general positive SC about himself/herself or even broad academic capabilities, and yet hold a lower academic SC for individual subjects such as maths or communication. This difference between capabilities and affect SC elements

within academic domains is similar to those found in academic PSE. According to Bandura (1997), SC is a composite view of oneself, presumably constructed through direct experience and adopted evaluations provided by influential people in our lives such as teachers, friends and family members. Academic SC refers to how students perceive their academic acumen and is related to a range of desirable education outcomes such as achievement (Marsh & Craven, 2006), interest (Marsh, Trautwein, Lüdtke, Köller & Baumert, 2005), coursework selection (Marsh & Yeung, 1997), and aspirations (Nagengast & Marsh, 2012). Although reflexive processes such as SC provide the understanding of how people perceive themselves and how these perceptions may influence their general outlook on life, Bandura (1997) cautioned that they are mostly concerned with global self-images and tend to detract from the power of explaining and predicting human behaviour. Moreover, it is difficult to measure a combination of different attributes in a single index of SC or to allocate weighting to any characteristics, especially since research has shown that a person's SC can differ across different domains (Bong & Skaalvik, 2003). Furthermore, the vast variations in behaviour that typically occur in any given field of activity under different conditions make it hard to justify how the same SC can produce different types of conduct. In comparative tests of predictive power, EBs were found to be highly predictive of behaviour, whereas SC was found to be less predictive and inconclusive (Pajares & Kranzler, 1995; Pajares & Miller, 1994, 1995). SC was also found to lose most of its ability to predict behaviour when the influence of PSE is factored out. According to Bong and Skaalvik (2003), the most obvious similarities between the theory of SC and PSE is the dominant role played by a person's perception of his/her competence. This perceived competence in given activities is the key ingredient in both self-beliefs (Eccles, Wigfield & Schiefele, 1998).

Researchers on academic SC assert that students' perceptions of their capabilities in given domains are a key contributor to their SC (Marsh, 1990, 1992; Wigfield, Eccles, Yoon, Harold, Arbretton, Freedman-Doan, & Blumenfeld, 1997; Wigfield & Karpathian, 1991). Many researchers also acknowledge that SC includes a PSE element and that the latter may be the most vital. Such findings suggest that perhaps SC mainly reflects people's PSE.

## **2.5 Culture and Achievement**

The influence of one's cultural background has also been found in research to be of importance to one's achievement motivation and behaviour. For example, Maehr and Braskamp (1986), Fyans, Salili, Maehr and Desai, (1983) and Maehr and Nicholls (1980) argued that different cultures tend to attribute different meanings to any given achievement behaviour or outcome, which subsequently influence their achievement-related efforts. For example, Leung's (1991) research on academic motivational orientation between Hong Kong Chinese high school students and Caucasian American counterparts indicated that a relatively higher proportion of the Hong Kong Chinese participants ranked achievement feedbacks such as 'good behaviour', 'demonstration of continuous improvement', 'potential to improve' and 'demonstration of ability to work hard' as more motivating and important than good grade attainment or outperforming other. In contrast, a significantly greater percentage of the American participants surveyed ranked achievement feedbacks, such as having outperformed their peers or attaining good grades, as more important for their performance motivation.

In the education setting, cross-cultural research by Stevenson, Lee, Chen, Stigler, Hsu, Kitamura and Hatano (1990) into the relationship between effort and ability attributions consistently showed that Chinese students strongly believe that effort is the more reliable source of academic achievement than ability. They found that Chinese parents in Taiwan emphasised hard work as of more importance than innate ability. In another study, Watkins and Cheng (1995) found that eighty percent of Chinese university students in Hong Kong indicate effort as their main source of academic achievement. The importance of effort attribution to academic success was further confirmed in studies involving Chinese students from various levels and teachers in Hong Kong (Hau & Salili, 1996). It is suggested that the emphasis on effort attribution to academic achievement is grounded in the belief that human ability is malleable rather than fixed (Chen & Uttal, 1988). Moreover, according to Tong, Zhao and Yang (1985), this way of thinking is inculcated in Chinese philosophy, particularly Confucianism, and reflected in a common Chinese saying: 'genius comes from hard work and knowledge depends on accumulation'. Therefore, from this perspective, innate ability may be able to determine the speed at which a person learns but, without effort invested into using the natural ability, an intelligent or quick learner may still amount to nothing.

### **2.5.1 Confucian Cultural Influence on Learning**

Research into how Chinese students approach learning showed that, like their western counterparts, they adopt both deep and surface learning approaches. Like their Western counterparts, Chinese students are also subjected to challenges and failures in their learning experience, and these kinds of setbacks are more frequent in an often-competitive Chinese learning environment and with large

student numbers in one class, whereby teaching designs do not take into account the students' varying abilities. However, Chinese schools operate in a context whereby the values and ambition to attain academic achievement are more uniform and Chinese students demonstrate some distinctive learning patterns that could be ascribed to Confucian cultural heritage (Marton, Dall 'Alba & Tse, 1996; Marton, Wen & Wong, 2005; Watkins & Biggs, 1996). In the Confucian-collectivistic culture, academic achievement is perhaps more than a personal success, as there is the element of fulfilling an obligation to oneself as well as to one's family and, for some, this obligation is extended to the society (Chan & Rao, 2009). Therefore, their motivational dynamics have, perhaps, a much more sense of interdependency than in the western context. Therefore, there is very little need to influence the students regarding the benefits of learning as, according to Li (2002), the value of learning is already inculcated into their cultural code. This strong determination to achieve, the belief that ability is malleable, and that effort can change abilities, may be factors that offset the negative influence of low PSE and at the same time boost persistence despite failures and setbacks (Hau & Ho, 2010). There is also a moral undertone that makes educational pursuit a virtuous one and thus, to a certain extent, downplaying the importance of self-interest and EB as essential factors to work hard (Yu, 1996). Moreover, the belief that effort investment is necessary to enhance ability means that students are not able to use low ability or low levels of PSE as an excuse for non-achievement.

## **2.6 Summary**

PSE reflects one's beliefs in one's capabilities to organise and achieve specific endeavours. In educational settings, PSE has been found to underpin

motivation, well-being and academic achievements. PSE is also based on the fundamental belief that one is empowered to effect change through one's actions. According to Bandura (1997), PSE is developed and changed as a result of how individuals select and interpret PSE-relevant sources of self-efficacy such as: mastery performance experience; vicarious experience; social/verbal persuasion; and physiological & emotional status.

Cross-cultural studies have consistently found that students in individualistic Western countries reported higher PSE by comparison to those in collectivistic East Asian countries. Although Chinese students consistently measured lower in self-efficacy than their Western counterparts, global testing trends from TMSS and PISA showed that students from countries with predominantly Chinese population persistently outperform their western counterparts. The reasons why this paradox exists contrary to the SET model are, so far, inconclusive and render this current study beneficial to investigating the mediating factors between PSE and achievements.

The purpose of this study is to understand factors affecting the development of EBs of Chinese VE students who have been reported not only to have low PSE but also feel stigmatised for having to take a 'fall back' education pathway as a result of their poor performance on the Middle School Examination. The literature reviewed on the framework of SET, previous studies on sources of EB development in several cultural contexts, as well as other cultural implications, provided the foundation for guiding this study. In the next chapter the methodology for this study will be discussed.

### 3.0 CHAPTER THREE – METHODOLOGY

In social science, the methodology relates to how the research is conducted and according to Taylor, Bogdan & DeVault (2015), our assumptions, interests and purposes shape the methodology we choose. In this chapter, the methodology of this study will be discussed.

According to Maxwell (2011) and Ravitch & Riggan, (2012), methodology and methods are both part of the preliminary design decisions and conceptual framework construction. They are interrelated but separate constructs and should not be mistaken as synonyms (Moses and Knutsen, 2007). Methodology denotes how knowledge is acquired, with the basic question in methodology being *“How do we know?”* It is one of three players in philosophy (Moses and Knutsen, 2007); ontology and epistemology being the other two. Ontology is concerned with reality and asks questions such as; *what is the nature and form of reality?* Epistemology is concerned with the relationship between the knower and what is known, and asks questions such as; *what counts as knowledge?* All three players have a symbiotic relationship which forms the fundamental understanding of philosophical assumptions or paradigm. Kuhn (1970) defines a paradigm as *“a set of beliefs, values and techniques which is shared by members of a scientific community, and which acts as a guide or map, dictating the kinds of problems scientists should address and the types of explanations that are acceptable to them”* (p.175). Table 3.1 shows the four major paradigms of which Critical Realism and Pragmatism are considered contemporary thinking shifts towards the middle from the two-extreme spectrums of the Positivism and Constructivism/ Interpretivism.



***Table 3-1- Philosophical Underpinnings of Research***

<b>Paradigm</b>	<b>Ontology</b>	<b>Epistemology</b>	<b>Methodology</b>	<b>Methods</b>
Positivism	Realism	Objectivism	Seeks to identify causes and outcomes.	Seeks predictions and generalizations and generating quantitative data
Constructivism or Interpretivism	Relativism	Subjectivism	Seeks to understand a phenomenon from individual's perspectives	Gains insight and the understanding of actions/behaviour and explains actions from participant's perspective
Critical Realism	Historical Realism	Subjectivism	Seeks to address social justice and marginalisation problems	Allows realities to be critically examined from a cultural, historical and political perspective.
Pragmatism	Constructive Alternativism	Objective Subjectivism	Seeks to derive knowledge about the problem through pluralistic approaches	Focused on using all available approaches to understand the problem to find solutions or applications to the problem.

In considering the choice of methodology, one is guided by the purpose of this study which is to gain understanding of the sources of self-efficacy of Chinese VE students at a higher vocational institute in China. From a practitioner's perspective, it is not sufficient to simply be aware that Chinese students from this education pathway have been found to lack self-efficacy in their studies, it is the intent of this study to understand the sources of their self-efficacy development that helped them progress to succeed at a higher vocational education level, which in turn could inform our instructional strategies to enhance EBs in this context.

Most of the research conducted on efficacy beliefs over the past five decades have been primarily focused on measurements of self-efficacy in various context, subsequently quantitative methods were adopted (Klassen & Usher, 2010). However, as this study is focused on the understanding of Chinese VE students self-EBs development using Bandura's SET as a theoretical framework, it was important to adopt

an approach that would facilitate this understanding. Moreover, according to Bandura (1997), there are many factors influencing the ways individuals weigh, interpret, and integrate information from sources of self-efficacy when making appraisals about their capabilities. Bandura (1997) also purported that the integration rules individuals adopt when weighting and interpreting efficacy-relevant information may be additive (the more sources available, the more EB are enhanced), relative (one source is more influential than another), multiplicative (combining effects of two or more sources), or configurative (the influence of one source being dependent on the presence of other source/s), each depending basically on personal and contextual factors. As the process of how individuals select, weight and integrate efficacy relevant information in the enhancement of their EB is a very complex and personal process in that the judgment rules adopted varies from individual to individual, it was considered more appropriate to adopt a qualitative approach with an interpretivist paradigm that would allow the participants to tell their stories about how they develop their EBs and why certain sources of self-efficacy were more influential.

From the ontological perspective in this study holds the assumption that there are multiple realities in people's world views, and that what the participants have experienced is true for them. The evidence of these multiple realities is presented where appropriate, using the participants own words to highlight different perspectives. The researcher's role here involved the collection of data from the various participants which were then analysed through the interpretivist lens. According to Willis (2007), interpretivism generally tries to seek understanding of a particular context and contends that truth and knowledge are subjective, as well as culturally and historically situated based on individual experiences and their understanding of these experiences. Interpretivism also has a 'relativist' ontological perspective suggesting that reality is only

knowable through socially constructed meanings and that there is no single shared reality (Ritchie and Lewis 2003). For example, every guest dining in the same restaurant will have their own perspective and experience of the meal and service provided. Their perspective and experience are influenced by their interactions with the choice of food and beverage, the people they were dining with, the service staff and their previous experiences. Individuals' perceptions reflect the existence of multiple realities and meanings are the categories that 'make up an individual's view of reality and with which actions are defined... culture, norms, understanding, social reality and definitions of the situation' (Krauss 2005, p.762). Hence, the participants for this study were interviewed individually to allow them to tell their own story and ensure that *'their individual voices are not lost in a pool of numbers.'* (Dwyer and Buckle, 2009, p.61)

According to Creswell (2013), the epistemological assumption when using a qualitative approach, means that it is important to for the researcher to be close in proximity to the participants, so that subjective evidence is collected based on individual views without influence by others. Moreover Creswell (2013) stressed the importance

*"to conduct studies in the "field," where the participants live and work—these are important contexts for understanding what the participants are saying. The longer researchers stay in the "field" or get to know the participants, the more they "know what they know" from first-hand information."* (p.36)

Furthermore Creswell (2014) and Maxwell (2012) suggested that interviews are considered appropriate to support the collection of data that can facilitate a deeper understanding of how's and why's. Although a qualitative approach may not be traditionally used in research in mainstream psychology, Marecek (2003) argued that qualitative research has a long history in psychology to the time of Wilhelm Wundt's Völkerpsychologie, and supporters of qualitative research in psychology are concerned

with human experience and actions (Marecek, 2003) which is what this study is concerned with. Moreover, Marecek (2003) contended that qualitative research has the unique aim of facilitating the meaning-making process. Usher & Pajares (2008) also suggested that qualitative approaches can offer

*“..... a rich understanding of the genesis of students’ self-efficacy beliefs, as they have the potential to describe the heuristic techniques students use to attend to, weigh, and appraise the degree of influence the sources have on their self-efficacy”* (p.784).

Furthermore, Bandura (1997) also pointed out that, “the inferential processes that govern the self-appraisal of efficacy are better elucidated by analysing how people select and integrate multidimensional efficacy information than by having them rate the relative weight they give to a few preselected factors” (p. 84).

As previously mentioned in the preamble, the researcher has lived and worked in China and in higher vocational education from early 2001 until the end of 2011, this provided her with first-hand experience of the cultural and education context of this study. Moreover, face to face individual interviews on-site where the participants were studying allowed the researcher to observe the environment of the institution, talk to some of the faculty members about the SAJVP to ensure that data collected is without external influence.

From an axiological perspective, she is both positioned as an insider and outside researcher. Her Chinese ethnicity and professional background place her as an insider, but the environment she grew up in, such as generational status, generation strata (late ‘baby-boomer’) and educational background, place her researcher position as that of an outsider. According to Merton (1972), the ‘insider’ can be defined as someone who has

prior intimate knowledge of the social group and their community. So, it follows that the outsider then could be defined as someone who is not knowledgeable about the people or community participating in the research.

There are many debates about the advantages and disadvantages of the insider and outside researcher position. This researcher agrees with the view suggested by Hammersley (1993), Burgess (1984), and Serrant-Green (2002), that having both empathy as an insider and distance are beneficial qualities for a researcher. One also argues here that the ability to empathise as an insider helps understand some of the nuances of behaviour within the community or social group, whilst the outsider position within the social setting gives one the scope to distance oneself and abstract information from the research experience. Furthermore, from an interpretivist perspective, the identities of both the researcher and the participants will most likely influence the research process as they operate within a common space that is the research environment moulded by both the researcher and the participants (England, 1994; Dwyer & Buckle, 2009). The up-front acknowledgement of the above-mentioned bias serves both as transparency and a reminder that one might be more insightful in how one approaches a research context, as well as allowing oneself to contemplate how one might interact with the participants.

### **3.1 The Research Questions**

This study is guided by the following questions:

- A.** What are the self-reported PSE and sources of self-efficacy of the Chinese VE participants?

The first question sought to identify how the participants perceive their self-efficacy and which information sources are important and relevant in enhancing their EBs. Although it was not the intent of this study to measure the levels PSE of the participants, it was necessary to find out how they perceive their self-efficacy prior to their English Entrance Examination for the SAJVP, their PSE after a year of study on the SAJVP and their PSE for graduation rather than assuming that they have low levels of PSE because of their previous academic underachievement experiences. These three sets of information were important to provide context to their reflection on their achievements and failures.

- B.** Are their self-reported sources of self-efficacy consistent with Bandura's four hypothesised sources of self-efficacy, namely: mastery, vicarious experience, social encouragement and physiological & emotional status, or are there other self-reported sources of self-efficacy identified?

The second question served to investigate if the participants' self-reported sources of self-efficacy are consistent with Bandura's hypothesised sources of self-efficacy and whether other sources of self-efficacy were identified.

- C.** What cultural value/s do the Chinese students hold about learning and academic achievement and how might they be perceived to impact on the students' academic PSE development?

The third question was to address the cultural context which may have impacted on the Chinese students' perceptions of achievements and connections to their PSE.

- D.** How do the students select, weight and integrate sources of self-efficacy information into their EB judgements?

The fourth question sought to find out how sources of self-efficacy affect the individual students in their EB development and how they perceive one source of self-efficacy to be more effective than another from their learning experiences.

### **3.2 Recruitment of Participants**

A purposive sampling method was adopted for the selection of participants, as typically used in qualitative research (Etikan, Musa & Alkassim, 2016). The purposive sampling here is defined as “*the deliberate choice of a participant due to the qualities the participant possesses*” (Etikan et al., 2016, p. 2) or, as Bernard (2002) suggests, the researcher makes the decision what needs to be known and finds the participants with the knowledge or experience, who are able to and willing to provide the information.

In this study, it was deemed necessary to include criteria for the selection of participants who will be in the position to provide information that could provide answers to the research questions. As success or mastery experience has been found to be consistently effective in enhancing self-efficacy, the participants must have experienced success in their VE, preferably through overcoming some form of academic challenge or difficulty. Therefore, this excluded students who are in their first year of study on their VE programme. They must also have the ability to communicate their experiences and opinions in the English language. The advantage of participants being able to communicate in English during the interview process would eliminate the need for a local Chinese interpreter and the risk of misinterpretations. This English language criterion basically also narrows the pool of possible participants to those from Sino-foreign joint venture programmes.

The targeted sample population was recruited from fifth or final year students from a Sino-Australian Joint Venture programme (SAJVP) in a higher vocational institution. This targeted student population has completed four years of studies on this SAJVP, which meant that they have successfully transitioned from the Chinese component of the programme (three years of studies) to the Australian component (final two years of study). They have also adapted from being taught in Mandarin (their native language) to an English medium of delivery and have completed six months' internship experience in various international hotels around China. These diverse learning experiences put them in a better position to provide comparative learning experiences from both the Chinese and Australian providers and on-campus, versus on-the-job, learning. Consequently, these participants are in a more informed position than the other years' students to report on whether their perceived SE has any influence on their academic achievement. The students who study on this SAJVP must learn to adapt to Australian teaching methodologies but also develop adequate English language proficiency to cope with the learning materials and undertake the assessments that are evaluated only in English, as well as based on Australian higher education standards. There is also an implicit assumption that when these students started their VE studies, they held low self-efficacy as reported by Stewart (2015) and Chen et al. (2000), as VE in China is considered a fall-back for students who failed to achieve adequate examination scores in their Zhong Kao to gain admission into normal senior high schools (Klorer & Stepan). Hence, these participants are well placed to talk about their learning experiences and what sources of self-efficacy have been beneficial to their PSE development.



### **3.2.1 SAJVP BACKGROUND**

This SAJVP is conducted by a higher VE institution located in south-eastern China. This institution has over six and a half thousand students and three hundred and fifty faculty members. It conducts thirteen five-year programmes in tourism, finance, trade & commerce, horticulture and fine arts, including one Sino-Australian joint venture five-year programme in business – majoring in hotel management. This SAJVP has been operating successfully since 2004 and has produced nearly three thousand graduates since its inception.

The SAJVP is a five-year jointly delivered programme of study comprising three years of studies provided by the Chinese partner, followed by the last two years offered by the Australian partner. To maintain anonymity for the institutions concerned, the Chinese higher vocational institution is referred to as XTVI and the Australian higher education institution as IHMS. During the first three years of their studies on the SAJVP, the students study the Chinese curriculum comprising of general subjects such as Chinese, English language, Maths, Geography, Chinese politics, morals and ethics and introductory courses to the hotel industry. The first three years of the SAJVP are delivered in Chinese (Mandarin) and administered wholly by XTVI. The SAJVP students also have more hours of English language on their Chinese curriculum than the other five-year programmes at XTVI. The last two years are delivered in English and administered by IHMS - to meet Australian standards and quality assurance. The Australian partner institute IHMS is a hospitality management school within an Australian university, offering business management degrees at undergraduate and postgraduate levels, majoring in hotels, resort, restaurants and events management.

The students join XTVI after the completion of junior high or middle school Zhongkao examination. Generally, this also meant that their Zhongkao results were inadequate to secure them admission into senior high schools. Hence, they are streamed into vocational education by the State Department Ministry of Education. The Zhongkao examination contains three subjects in which students need to score well for admission into senior high schools: Chinese language, Mathematics and English language. The Chinese Director of Foreign Affairs overseeing the SAJVP stated that the students who elected to study on the SAJVP have more confidence in their English language ability, or at least they like studying English language, even though the SAJVP is a business programme focused on hotel management. These students and their parents also view the SAJVP as an alternative pathway to further studies for a bachelor's degree, either in China at private universities or other universities overseas. Upon successful completion of the five-year joint-programme, the students will be issued with both Chinese and Australian qualifications from the Chinese Ministry of Education and the Australian Higher Education Qualification Authorities.

### **3.2.2 Access and Recruitment Process**

Contact with several higher vocational institutions in China was made prior to ethics application being lodged, to survey support for this research and the access conditions, or limitations of access that might impact on the research design. Only one institution responded positively (that was XTVI) and was also obliging in offering any assistance. Once the ethics application was approved by the Virtual Programme Research Ethics Committee (VPREC) (see Appendix A), the Campus Director was contacted, and arrangements made to advertise for volunteers. An announcement was made by the Campus Director at a students' general assembly, and copies of the Invitation to Participate (see Appendix B) were also placed on public notice boards on

their campus. The interested volunteers contacted the researcher directly by email to express their interest in participating. The volunteers were subsequently provided with the Participation Information Sheet (see Appendix C) and Student Consent form (see Appendix D). To ensure maximum readability and understanding, these documents were written in both English and Chinese. All these documents had been previously submitted to, and approved by, the EdD Virtual Programme Ethics Committee (VPREC) on 13 July 2016 (see Appendix A). Following confirmation to participate, consent forms were signed and collected, and interview schedules were arranged.

### **3.2.3 Sample Size**

When deliberating the adequate sample size, since there did not seem to be any hard and fast rule to be found in the literature, the following arguments from the literature review guided the decision making. According to Ritchie, Lewis and Elam (2003), the minimum sample size for qualitative studies is much smaller than those required in quantitative studies. Ritchie et al. (2003) explained that there is a point of diminishing return to a qualitative research sample size, as more data does not necessarily equal more pertinent information because a single occurrence of a chunk of data or a code is enough for it to be captured in the data analysis framework. In contrast to quantitative data, frequencies are seldom necessary for qualitative research, as a single occurrence of the data is theoretically as useful as multiple occurrences in understanding the process behind a code because qualitative research is concerned with meaning and not making generalised hypothesis statements (Crouch & McKenzie, 2006). Analysing qualitative data is also very labour intensive and time-consuming and hence it is simply impractical to conduct data analysis of large sample sizes. Guest, Bunce and Johnson (2006) and Bertaux (1981) suggested that fifteen is the minimum recommended sample size. This sample size range is considered small enough to allow

each participant to have a voice and concurrently provide enough data to facilitate rigorous analysis (Robinson, 2014). Glaser & Strauss (1967) and Marshall, Cardon, Poddar & Fontenot (2013) also suggested that sample size should, in general, adhere to the concept of saturation, which refers to the situation when new data collected does not yield any further information on the issue under investigation. Hence, it was considered adequate that a minimum sample size of fifteen participants would yield ample data using individual semi-structured interviews.

A total of twenty-three students responded to the advertisement, and a total of nineteen students were able to confirm interview schedules. Those who were unable to confirm interview schedules during the one-week period when the researcher was on-site for data collection, in September 2016, were kept as reserve volunteers in the event of withdrawals or cancellations or more data being needed should data saturation not be reached.

The first two students (see Table 3.2) scheduled for interviews participated in the pilot interview and interview protocol. This pilot allowed for any adjustments to be made to the interview process, or interview protocol, before the remaining seventeen participants were interviewed. Of the seventeen remaining students who confirmed scheduled interview times, one student did not attend for the interview without notice, and another student cancelled at the last minute. As there was insufficient time to reschedule volunteers from the reserve volunteers, this study is based on data collected from fifteen students (N=15), exclusive of the students who participated in the pilot interview.

**Table 3-2 - Pilot Participants' Profile**

PSEUDONYM	AGE	GENDER	YEAR OF STUDY	CITY	PROVINCE	SIBLING STATUS
PLUM	20	F	FINAL YEAR	SUZHOU	JIANGSU	ONLY CHILD
DIAMOND	19	F	FINAL YEAR	SUZHOU	JIANGSU	ONLY CHILD

### 3.3 Data Collection

The data collection was conducted on-site at the SAJVP campus in China in September of 2016. The data collected here is primarily qualitative, but not exclusively non-quantitative, as explained previously. The data source is comprised of interview transcripts derived from interview recordings of the students' reflections and narratives of their learning experiences. Demographical information of each student such as age, gender, parents' education background etc., were also collected to form a summary of the students' profile (see Table 3-3).

**Table 3-3 -Participants' Profile (N=15)**

PSEUDONYMS	AGE	GENDER	YEAR OF STUDY
Angel	20	FEMALE	FINAL YEAR (YEAR 5)
Cherry	20	FEMALE	FINAL YEAR (YEAR 5)
Jasmine	21	FEMALE	DIRECT ENTRY (YEAR 4)
Jason	20	MALE	FINAL YEAR (YEAR 5)
Ji	19	MALE	FINAL YEAR (YEAR 5)
Liling	19	FEMALE	FINAL YEAR (YEAR 5)
Lily	20	FEMALE	FINAL YEAR (YEAR 5)
May	19	FEMALE	FINAL YEAR (YEAR 5)
Mei	20	FEMALE	FINAL YEAR (YEAR 5)
Moon	21	MALE	DIRECT ENTRY (YEAR 5)
Rose	20	FEMALE	FINAL YEAR (YEAR 5)
Spring	19	FEMALE	FINAL YEAR (YEAR 5)
Summer	20	FEMALE	FINAL YEAR (YEAR 5)
Sunny	20	MALE	FINAL YEAR (YEAR 5)
Victor	19	MALE	FINAL YEAR (YEAR 5)

### 3.3.1 Interview and Interview Protocol

The design of the interview questions was guided by the research questions, theoretical construct of self-efficacy (Bandura, 1997) and literature review. The interview protocol in Appendix E was designed to try to solicit information from the individual student's learning experiences that would provide answers to the research questions. According to Jones, Torres and Arminio (2014), the framework of the basic interview protocol consists of four phases, namely: i) aligning interview questions with research questions; ii) constructing an inquiry-base type conversation; iii) obtaining feedback on the interview questions; iv) piloting the interview. These steps were adopted to help ensure that the research instrument was appropriate for the students, as well as congruent with the aims of the study. The interview protocol was constructed using plain English. The sequence of the questions was also arranged to start with questions to elicit general and demographic information which are easy for the students to answer first. These are meant to help the students settle into the interview, followed by the more focused questions. As much as possible, open-ended questions were constructed to allow the students to express their experiences. A casual, conversational approach was also adopted during the interview.

The interview protocol was reviewed and checked to ensure that the interview questions are aligned with the research questions (see Appendix F). The interview protocol was also reviewed and translated into Chinese by an alumnus who graduated in mid-2000 from the same SAJVP and is also fluent in both English and Chinese. The main change that was made was from her feedback was to use the terms *self-confidence* or *self-belief*, rather than self-efficacy, as the latter was considered too technical and unfamiliar. Self-confidence as a term seems to refer to more specific situations, whilst self-belief seems to refer to a general sense of confidence in one's

ability. The translated Chinese version of the interview protocol was kept as a backup plan should some of the students lack confidence with their English proficiencies.

The edited copy of the interview protocol was subsequently piloted with two of the volunteers recruited from the same cohort of students targeted for this study. This pilot provided a final check for question ambiguity and whether the English was pitched at the right level. There were no significant issues found in the pilot of the interview protocol that needed editing, with the exception that sometimes examples of scenarios had to be provided to elaborate a question for better understanding. For example, for one of the students, it was necessary to provide her with examples of physiological and emotional status, which could not necessarily be simplified by rewording the question. It was noted that for one of the students who was more communicative, the sequence of the questions had to be rearranged according to the responses from the student to maintain the flow of the conversation and her thought process, as she would quite often be elaborating with information that was due to be solicited in later questions.

It was also found that the students were proud to 'show off' their English competency. They were comfortable with interviewing in English even when, from time to time, the offer of using Mandarin was made, indicating that the English was pitched at the right level and that the participants were comfortable with the casual, conversational approach adopted. Notes were also taken during the interviews, to record any ideas or points that needed further probing or clarification.

Although each interview was planned for no longer than an hour to prevent student fatigue, the average time per interview was 1 hour 15 minutes. From this experience, it is essential to be attentive and sensitive to the responses and be

prepared to be flexible and adaptive in the interview approach. The on-site face to face format had the added benefits that the interviewer was able to sense or observe non-verbal signals, and the participants were able to take their time to respond, without feeling rushed.

After each interview, the participants were debriefed. They were informed that their transcripts would be emailed to them for checking and verification that it was an accurate record of their responses, and that they could take this opportunity to make corrections or additions to their interview transcripts.

### **3.3.2 Transcribing Interview Transcripts and Follow up**

The interview recordings were transcribed into 'clean verbatim' by the researcher. The term 'clean verbatim' here refers to transcripts in which some crutch and filler words such as "uh, ah, er, you know, okay..." that do not add any meaning or coherence, are deleted. Also, only the obvious nonverbal expressions were recorded in the transcripts: for example, when there is an expression of nervous laughter or using verbal pauses to indicate thought searching. Some informal truncation of individual words such as '*cause, gonna, donna, wanna* were changed to the correct spelling such as *because, going to, don't know or want to*. Otherwise, grammatical errors or sentence structural errors were kept in their original forms. Notes were made during transcription to record any points that required further clarification or elaboration by the relevant participant.

It was noted during the transcribing that the term 'self-trust' was used by a few participants. This appeared to be a direct translation from the Chinese language to represent self-belief. The researcher also held concerns about the interchangeability of



the terms self-confidence, self-belief and self-trust after reviewing all transcripts.

Therefore, to make sure that all participants are using these terms to mean the same thing, the following question was emailed to all fifteen participants to double-check their understanding of these three terms:

*"Does having self-confidence, believing in yourself and trusting yourself all have the same meaning to you? Yes or No? If your answer is No; please explain why not with examples?"*

Additional questions were sent to a few participants to clarify some parts of their responses that were not picked up during the face to face interview. All the participants were very cooperative with the additional question/s and responded promptly with their answers by return email. All final copy of transcripts was also 'signed off' by the participants. Only two participants made minor corrections in their transcripts. Any changes needed were made accordingly before data analysis began. This checking and verification process by the participants also served as part of the validity and reliability process (Noble & Smith, 2015).

### **3.3.3 Age and Gender Mix**

The participants were aged between 19 to 21 years, with the average age being 20 years old. The average age range of 19 to 20 years of age is standard for participants studying at this kind of VE institution in China. There are two exceptions, and these are the two 21-year olds who have entered the SAJVP through direct entry via non-governmental recruitment processes or channels. The gender mix is dominated by female participants, as shown in Table 3.4. The result of this gender mix was random, as there was no plan to recruit a balanced gender mix, since this was not a part of the research objectives. Although the total number of female and male students

studying on this SAJVP was unavailable, from the researcher's eleven years' experience in China managing such a Sino-Australian joint venture VE hotel management major programme, it is typical for female students to outnumber male students in such hospitality programmes, as female staff are more in demand in this service industry.

**Table 3-4 - Gender Mix**

<b>GENDER</b>	<b>NUMBERS</b>	<b>PERCENTAGE</b>
FEMALE	12	80%
MALE	3	20%
<b>TOTAL</b>	<b>15</b>	<b>100%</b>

### **3.3.4 Level of Study on the SAJVP**

**Table 3-5 Level of Study on the SAJVP**

<b>Final year students of SAJVP.</b>	<b>Direct Transfer from Australian partner campus in Australia (Final year student of SAJVP.</b>	<b>Direct Entry from China 4<sup>th</sup>-year student of SAJVP.</b>
13	1	1

Table 3.5 shows fourteen of the participants are in their final year of studies on the five-year Sino-Australian Joint Venture Programme (SAJVP). Amongst these, there is one from Hong Kong, who is a direct entry transfer from the parent programme in Australia. There is also one student who is a direct entry, but she is a fourth-year student of the SAJVP. Although these two students did not study the SAJVP from the first year, as with the other participants, their interviews produced some interesting data that could benefit this research, therefore they were kept in the data set.

### 3.4 Data Analysis

Thematic analysis (TA) was adopted, as qualitative research methods are described as very complex, varied and nuanced, and TA is considered an excellent starting point to qualitative research for a novice researcher (Holloway & Todres, 2003). Braun and Clarke (2006, p. 6) define TA as "A method for identifying, analysing, and reporting patterns (themes) within data. It minimally organises and describes your data set in (rich) detail."

Essentially TA is a method of recognising and analysing themes or patterns in qualitative data that emerged as important to study. According to Braun and Clarke (2006), a major advantage of TA is that it is adaptive and does not need the researcher to have an in-depth technological and theoretical knowledge of the methods, making this method of analysis more accessible; even though it entails more input and interpretation on the part of the researcher. It is a method that transcends the analysis of explicit words and phrases. Emphasis is placed on the identification and description of both implicit and explicit meanings within the data.

TA is also valued for its usefulness in capturing complex meaning within textual data sets - emergent themes from the data help to inform the research questions and, ideally, the outcome of a thematic analysis should highlight the most salient or important clusters of meanings evident in the data. A hybrid approach of thematic analysis was used in this study. This included a combination of both the data-driven inductive method of TA (Boyatzis, 1998) and the deductive approach with an a priori set of codes (Crabtree & Miller, 1999) guided by the literature review, Bandura's SET framework and research questions. This hybrid approach combination of both the

inductive and deductive process in TA was considered complementary to the research questions.

The pre-coding involved familiarisation with the data by reading each transcript over several times. This pre-coding phase allowed the researcher to sense potential themes in the raw data. Notes were made for tentative ideas of codes, and any noticeable themes or patterns were jotted down manually. The term 'code' refers to *"a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and evocative attribute to a portion of language-based or visual data."* (Saldaña, 2015, p. 3). Codes are typically created to represent the identified themes and subsequently analysed by comparing code frequencies: the co-occurrence of codes identifying relationships between codes in the data (Braun & Clarke, 2006).

**Figure 3-1 Data Analysis Process Using NVivo**

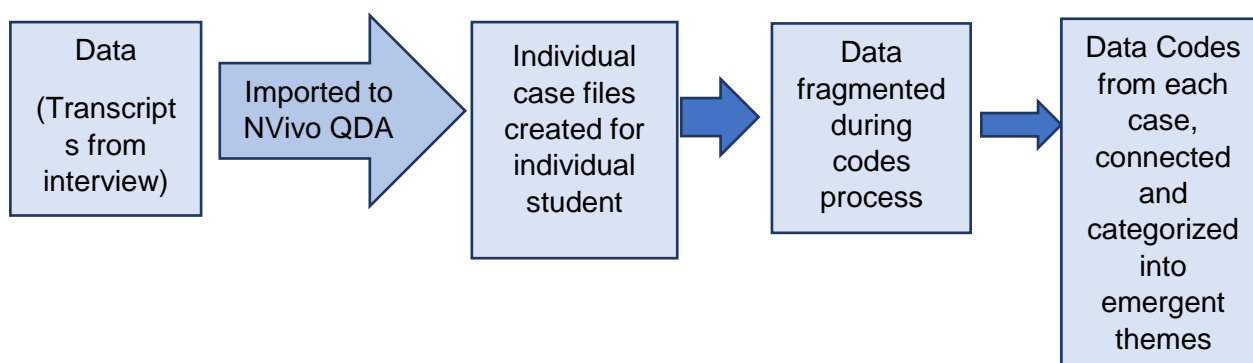
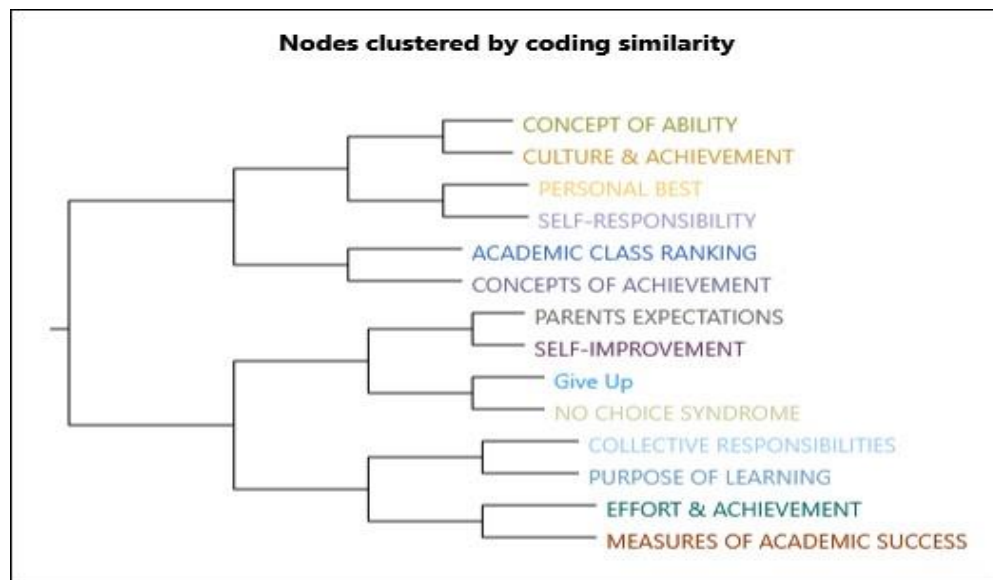


Figure 3.1 above shows how the data was processed using NVivo. The data set consisting of interview transcripts was imported into NVivo. The transcripts then went through a fragmentation and connection process as part of the coding cycles (Dey, 2003): fragmenting the data into bits and chunks of information and assigning codes to represent their relevance to the research questions. For example, Figure 3.2 shows an analysis run by NVivo QDA after the first cycle of coding to sort coding by similarity. The

codes, or 'theme nodes' as they are referred to on NVivo, were created from the ideas noted down during the pre-coding phase. A journal or memo was also created on NVivo 11 Pro to record annotations of such ideas, meaning, questions, and reflection during the data coding process.

**Figure 3-2 NVivo Nodes Clustered by Coding Similarity**



The connecting process involved linking and connecting codes that are similar to categories and are referred to as overarching themes in this study. The creation of themes within the connecting process highlights the context and richness of the fragmented parts of the interview dataset, which becomes interpreted (Sivesind, 1999). The fragmenting and connecting activities involved making comparisons within each interview transcript and then making comparisons between interview transcripts within the whole cohort of students. Each transcript was processed separately and following the same sequencing cycle. In other words, every phase or cycle of coding is applied to each transcript before moving to the next cycle of coding.

The first cycle of coding focused on codes created based on the theoretical framework and free coding. Free coding here refers to codes created when random

new themes emerged from the data that do not fit into the codes previously created. Codes created in the first cycle of coding were further analysed during the second cycle of coding and often these were rearranged into emerging themes. Some codes became overarching themes, whilst others were subsumed under the relevant overarching themes. In this study, the researcher found that looking at the data with fresh eyes, after a break, gave some time and distance from the data to reflect and helped to shed new light on the data. Subsequently, when the overall coded data were analysed again after the second cycle of coding, some of the codes were further split or merged. Some codes were also discarded subsumed in other existing codes when the coded data were recoded.

The coded data were eventually organised into a hierarchical structure with overarching themes (See Table 4-1 – Theme Matrix pp. 65-66). Even with the aid of a QDA such as NVivo in TA, it is still the responsibility of the researcher to decide and assign codes to the data. This decision-making process was based on how the researcher interpreted what was the participant was saying or trying to say. At times, the same piece of data could be coded more than once. The following extract from the transcript is an example:

Data	Coding
<p>Interviewer: Why do you say to yourself that you are a clever girl? Did your teacher tell you that you are a clever girl?</p> <p>Liling: No. Just I think I am clever. Maybe some subjects like sales and marketing, I am good at it. So, I think I am clever. If I work hard. I will be better.</p>	<p>Source of self-efficacy – self-encouragement</p> <p>Positive academic SC.</p> <p>Inference of high levels of academic PSE (in sales and marketing).</p> <p>Source of self-efficacy – mastery experience.</p> <p>Justification of self-appraisal.</p> <p>Indications of transferability of EB.</p> <p>Hard work -Effort Investment</p>

There was much information that could be gleaned and interpreted from this example. In the coding process, this response could be coded under several themes, such as mastery experience, PSE, self-concept, concept of ability, effort and achievement and transferability of self-efficacy. In this example, the decision was taken not to split the response as it would render the sentence meaningless hence, in such cases, the one response was coded several times in the relevant codes and themes. As a result, the data analysis process for this study took many months to complete.

The QDA was helpful in storing, organising, managing and reconfiguring data to allow for analytic reflection by the researcher. The analysis feature of NVivo is also designed to analyse text frequencies and word associations. This feature was not found to be particularly relevant to the approach of this study. Nevertheless, it is very helpful for locating chunks of text codes within each transcript. It also supported quick referencing and cross-checking. Memo notes made during the coding and theming process were also useful during the write-up phase.

### **3.5 Validity and Reliability**

The quality of any research is crucial if the findings are to be trustworthy. Lincoln and Guba (1985) suggested criteria such as truth value; consistency; neutrality (or confirmability); and applicability. The truth value in this study relates to the acknowledgement of the existence of multiple realities and ensuring that the participants' perspectives are presented as accurately and clearly as possible, by using direct quotes from their interviews. The researcher's bias because of personal experience and perspectives was also made transparent in the Pre-Chapter and earlier in this chapter, to address the 'soundness' or reliability of this research. A reflective journal was kept noting the phases of thought process throughout this study. Where

appropriate, decisions were documented within the thesis document to maintain transparency. The participants were also involved in their final transcript checking, modifying, or expansion of information, ensuring that the transcripts were an accurate account of their perspectives at the time of their interview. The results of the participants' accounts are presented in the Findings chapter, which includes the interpretations and discussions of the findings. The participants' own words from the raw data were cited in the findings presented to ensure that the interpretation of the data maintains a direct link to the participants' own reflections. Nonetheless, it is necessary to reiterate that the interpretivist approach adopted in this study is focused on the complexity, richness, multiple interpretations and meaning-making of the participants' own experiences and is explicitly subjectivist. The axiological implication of this is that the researcher acknowledges that her interpretation of data, and thus her own values and beliefs, played a key role in the research process. Furthermore, according to interpretivist philosophy (Saunders, Lewis, & Thornhill, 2007) it was important for the researcher to adopt an empathetic stance and understand the social world from the participants' perspective which was helped by the researcher's own ethnic Chinese background and having lived and worked in China as well as worked in the same educational context as the research participants.

### **3.6 Ethical Considerations**

Qualitative research using semi-structured interviews or in-depth interviews regarding students' experiences can probe into areas that are not anticipated, and therefore the issue of privacy and confidentiality is a major concern. Rigorous documentation which details all procedures that the researcher undertook to protect the students' privacy and confidentiality can be found in the ethics application submitted to the University of Liverpool (UoL) Virtual Programme Research Ethics Committee



(VPREC) in Appendix A. The researcher was careful to ensure that the necessary precautions were taken to safeguard against any breach of research ethics. For example, each student was fully informed of what their involvement entailed in the bilingual PIS (in English and the participant's native language) (See Appendix C). They were also allowed a week to read the PIS and contemplate their involvement before signing consent. Formal consent was secured for both participation and recording interviews. Before interviews commenced, reiteration was made to assure students that they could withdraw at any time until data analysis was completed, without any consequence. They were assured that their data would be kept in password protected and secure storage, and data will be destroyed after the research is completed, in accordance with current University of Liverpool research policy. The anonymity of students and institutions is protected with pseudonyms. During the interview process, care was taken to avoid probing into sensitive areas without consent from students. Contact details of the participants' school counsellor were available should the participants require a referral. The participants were also informed upfront that the researcher used to be a teacher on their programme, many years ago, and the research is undertaken as part of an independent doctoral study. This was to ensure that participants are informed that there is no relationship between the research and their institution. When writing up the research, the researcher was mindful that quotes used from the interviews did not breach students' privacy and confidentiality.

### **3.7 Summary**

This study adopted a qualitative interpretivist approach using semi-structured interviews to capture the participants' learning experiences and how they develop their PSE. Due to access constraints, the sample population was recruited from a Sino-Australian Joint-venture programme at a higher vocational education institution in

south-eastern China. A hybrid TA using inductive and deductive analysis was adopted in the data analysis, and the processing of data was carried out with the aid of NVivo 11 Pro. In the following chapter, the findings of this study will be discussed.

## 4.0 CHAPTER FOUR – FINDINGS

In this chapter, the findings will be presented at both manifest and interpretive levels of analysis. Where appropriate, the participants' voices will be quoted verbatim or paraphrased to exemplify their views. The presentation of the findings is structured around the research questions. Although this study was not designed as a mixed method research, some quantitative data such as the participants' self-reported inferred levels of PSE before their Entrance Exam for admission to the Australian component of the SAJVP, PSE on prospects of graduation, their self-reported inferred levels of general PSE and their self-reported Academic Class Ranking, were collected to provide context to their learning experiences and EB development. These self-reported inferred levels of PSE cannot be equated to scores that reflect Perceived Self Efficacy as understood by Bandura. However, they were necessary to provide a better understanding of how the participants PSE scores relate to their narratives on their perceptions of their academic performance and other behavior. This would require the use of validated instrument. According to Saldana (2011),

*"Sometimes numbers can add insight, texture, and context to the repository of qualitative data in a report" (p. 61).*

For example, one of the direct entry student Jasmine related that when she started the SAJVP, gave herself a score of nearly 10 out of 10 inferring that her perceived level academic capabilities for this programme was very high. However, after she began her studies on the programme, her inferred level of PSE dropped to an 8 inferring loss of EB. She explained this difference to:

JASMINE: "The reality. The textbooks, the assignments are not so easy. Misunderstanding all the time about what teacher said, and what the question is...."

Furthermore, she also reported that she perceived herself at the time of the interview and according to academic performance as being that of an average student. On the other hand, another participant Cherry who gave herself a score of 8 out of 10 to infer an above average level of EB in her capabilities at the time of the interview, perceived her academic performance as amongst the top ten percent of the class. The numerical data here helped provide some differentiation to the way each of the participants perceive their inferred levels of EB. The numerical data here also helped provide further insight that Jasmine perceived studies on a higher vocational programme would be easier than studies at a university since she was not admitted to vocational education by default but by choice. But she soon realised that her performance was not better than an average student in the SAJVP.

**Table 4-1** is a Theme Matrix detailing the major themes that were captured from the participants' interviews. This theme matrix was generated by the QDA NVivo Pro 11 used to conduct the data analysis. It features four overarching themes and fourteen sub-themes. As mentioned in Chapter Three – Methodology, a hybrid approach of thematic analysis that included data driven inductive approach and deductive approach guided by the literature review, Bandura's SET and the research questions was adopted.

Although this study involved only one group of Chinese students from a Sino-Australian Joint-venture programme at a Higher VE institution in China, there was a large quantity of rich data collected from the participants to allow reflection on the data and capture the essence of their experiences and try to understand the influences of sources of self-efficacy on their EB development.

**Table 4-1 Theme Matrix - Coded Themes Structure of Analysed Data**

	<b>Overarching Themes and Sub-Themes</b>	<b>Description</b>
<b>1.</b>	<b>CONCEPT OF SELF-EFFICACY (SE)</b>	This overarching main theme captures how the meaning of self-efficacy is conceived by the participants.
	<b>1.1 Self-Reported Inferred Levels of</b> - PSE Before Entrance Exam - PSE on Prospects for Graduation - General PSE - Academic Class Ranking	This sub-theme captures the self-reported inferred levels of PSE. The inferred levels of PSE provided by the participants provides context to their narratives about their learning experiences and information related to their EB enhancement or weakening.
<b>2</b>	<b>SOURCES OF SELF-EFFICACY</b>	This main overarching theme captures the sources of self-efficacy development reported by the participants.
	<b>2.1 Mastery Experience</b> - Difficulty Level and Achieving the impossible - Transferability of SE	This sub-theme captures prior successful and unsuccessful learning experiences and their influences on the participants' academic and work-related self-efficacy.
	<b>2.2 Vicarious Experience</b>	This sub-theme captures how role models and observations of successful performance by others impact on the participants' performance ability beliefs.
	<b>2.2 Social Encouragement</b> - Parents & Family - Self-encouragement - Teachers/Supervisors/Managers - Friends & Colleagues	This sub-theme captures how encouragement, or lack of encouragement, by various significant others in the participants' lives influence their academic or personal self-efficacy.
	<b>2.3 Physiological &amp; Emotional Status</b>	This sub-theme captures how physiological status, such as anxiety, stress and other emotions, impacts on the participants' EBs.
<b>3</b>	<b>CONCEPT OF ACHIEVEMENTS</b>	This overarching main theme captures the participants' conception of achievement and various influencing factors.
	<b>3.1 Purpose of Learning</b>	This sub-theme captures the participants' perceptions of the purpose of learning.
	<b>3.2 Cultural Expectations &amp; Achievement</b>	This sub-theme captures influencing factors on the participants' achievement which could be considered as culturally related.
	<b>3.3 Measurements of Academic Success</b>	This sub-theme captures how the participants measure academic success.
	<b>3.4 Effort &amp; Achievement</b>	This sub-theme captures how the participants regard achievements achieved through effort.
	<b>3.6 Concept of Ability</b>	This sub-theme captures how the participants perceive ability: that is, if it is inherent; or malleable and could be acquired through learning.
	<b>3.7 Self-Concept</b>	This sub-theme captured how the participants saw themselves and how this relates to their achievements.

## **4.1 Research Question A - What are their self-reported PSE and their sources of self-efficacy?**

In this study, there is an assumption that the Chinese VE participants held low levels of PSE, having had experienced previous failures in their academic endeavour and subsequently had to take a default pathway to vocational education (see Figure 1.1). Nonetheless, it was considered necessary to know how the participants perceive their academic PSE to determine if they themselves felt they have low levels of PSE, as generalised by previous studies (Rans & Chen, 2014; Zhang et al., 2015).

Since all the participants with the exception of two participants - Jasmine and Moon, who were direct entry students into the SAJVP, have successfully completed their first year on the SAJVP programme, one could assume that they have had success experiences in their studies to progress to the final year of their five-year programme. These participants therefore have both failure and success experiences stories to relate. Although Jasmine's and Moon's profiles did not fit exactly to the purposive sample criteria for this study, there was interesting information that emerged from the data analysis that is significant to the understanding of this research topic, hence their inclusion.

### **4.1.1 Concept of Self-Efficacy**

During the interviews it was found that sometimes the participants used the terms self-confidence, self-belief and self-trust interchangeably. Therefore, after the transcriptions of all the interviews, the participants were emailed a few questions to seek further clarifications of their understanding of these three terms used.

*Question: "Does having self-confidence, believing in yourself and trusting yourself all have the same meaning to you? Yes or No? If your answer is No; please explain why not with examples?"*

<b>Table 4-2 - Concept of Self-Efficacy</b>
<b>Angel:</b> Yes, for me, self-confidence, believing in myself and trusting myself is the same thing.
<b>Lily:</b> I think if you have good confidence in yourself, first you must have trust in yourself that you can do it. Because if you don't belief in yourself, then you also cannot do things well.
<b>Liling:</b> Very little difference. Self-confidence just needs confidence. But believe and trust needs abilities.
<b>Victor:</b> I think the last one, the level of trusting yourself is higher than the other two. Trust yourself is believing in yourself that you can achieve anything by yourself.
<b>Sunny:</b> Yes, I think they all mean that you have to believe in yourself.
<b>Spring:</b> I think believing in yourself and trusting yourself have the same meaning for me. However for self-confidence, if I mark myself out of 10, it would be a 5. I am always worried about my future and I am not sure what I can do after I graduate. Therefore I do not have enough self-confidence in myself.
<b>Rose:</b> I think self-confidence and self-belief is more like nouns. And trust in yourself is more like a verb.....I like being challenged. I think I prefer to find things out by myself. If I can solve the impossible problems, I will feel more confident.
<b>Moon:</b> Yes, they have the same meaning to me.
<b>Mei:</b> Yes, I think these terms mean the same, however they have a range. Confidence is the first step, then believing in yourself. The deepest one is trusting yourself.
<b>Ji:</b> My answer is yes. In my opinion, they are similar.
<b>Jasmine:</b> I think self-confidence is like a building that building include self-belief and trusting in yourself and these like a bricks of the building.
<b>Cherry:</b> In my opinion, whether the things are difficult or not, I always feel confident because I believe in and trust in myself that I can reach the target. Thus I think the three concepts have relationship with each other.
<b>Summer:</b> Yes, they have the same meaning for me.
<b>Jason:</b> In my opinion, I do not think these three words mean the same to me because self-confidence is people's quality, belief in yourself is a thought and trust in yourself means you may have trust in your ability but no confidence that you can do it.
<b>May:</b> Yes, they mean the same to me.

Although the majority of the participants perceive the three terms to be same or similar in meaning, 'trusting in yourself' seems to convey a stronger meaning for some. This may be that having self-belief is translated closer to the Chinese equivalent of self-trust. Here is a question that was posed to Angel in the interview:

Interviewer: Is there a Chinese term or Chinese expression for self-belief?

Angel: Yes, it means trust in yourself.

Table 4.3 below show a summary of how the participants inferred their levels of PSE in passing their Entrance Examination for admission to the Australian component of the SAJVP and their inferred levels of PSE in graduating on schedule from the programme. These are self-reported scoring by the participants based on the interviewer's question below. The researcher would like to highlight here that these numbers were not based on any validated self-efficacy measurement instrument and therefore cannot be equated to PSE scale ratings as understood in Bandura's studies.

INTERVIEWER: *"Before you joined the SAJVP in 2015, on a score of 1-10, 1 being the lowest and 10 being the highest, how would you say your level of belief was in your ability to pass the entrance exam for the SAJVP?"*

The findings show that majority of the participants inferred an increase in the level EB in their studies. Their improvement in English proficiency, ability to cope with their course assessments demands and their ability to communicate with fellow foreign or international students in their programme and foreign guests during their internship also validated their competencies. There were two participants namely Ji and Lily who inferred low EB in passing their Entrance Examination, they reported a



significant increase in their EB for graduating on schedule and indicated the benefits from their teachers' and internship experience. Lily also reported that her father's encouragement contributed to her English proficiency and in turn her EB that she can successfully pass the SAJVP. Only one participant (Angel), did not report any improvement in her EB. Twelve participants in total reported higher EB for graduation than passing their Entrance Examination for admission into the Australian component of the SAJVP, inferring that during the first year of studies on the Australian component of the SAJVP, they have raised their academic PSE. The participants were also asked to report on how they perceive their academic class ranking. This information provided indications of whether their academic PSE is reflected in their perceived academic performance. It is also important at this point to iterate that the academic class ranking does not necessarily reflect their actual class ranking.

**Table 4-3 – Participants Self-reported Inference of Level of PSE prior to their Entrance Examination and in graduating on schedule.**

Participants	Inferred Level of PSE in passing their Entrance Examination	Inferred Level of PSE in graduating on schedule
Angel	<i>Maybe just a 6</i>	<i>The same 6</i>
Cherry	<i>Think maybe 6.</i>	<i>I think it's 8.</i>
Jasmine	<i>I think nearly 10.</i>	<i>8.</i>
Jason	<i>For me, the truth would be 8.</i>	<i>To graduate maybe is very hard for Chinese students because English is not our mother tongue. Just for one class, we have report, presentation and final exam. Because English is not mother tongue for me so it is very hard for me. But of course, I will try my best. I never have to repeat a subject so far. Maybe 7. Because, to pass Level 2 is harder than Level 1. But I will try my best to pass all the subjects.</i>
Ji	<i>Between 4 to 5</i>	<i>7. Maybe just English and internship helped me a lot. I think most important is my communication with classmates and teachers. Our teachers encouraged to speak English.</i>
Liling	<i>7</i>	<i>7 or 6. Maybe it is my English. Yes, I think my English is not very good. So sometimes, some words are difficult and I can't understand in the class. So I think it's a little hard.</i>
Lily	<i>Before my English is not so good and I am afraid to communicate with others and with foreigners because I think my English is so poor. I have no ability to chat with others. Maybe 4.</i>	<i>7. My father always say to me do not be afraid to communicate with foreigners. People don't care so much about your grammar. You can also use your body language to communicate. So always my class teacher told me to chat with others. In the process of internship, I also have to chat with foreigners. If I don't do it, I might lose my job so I have to do it.</i>
May	<i>7</i>	<i>9. When I go to the Australian programme, the classes are quite difficult actually, and I found when I finish one assessment or one report that is very difficult, I feel very proud of myself and I have more courage and confidence.</i>
Mei	<i>8.</i>	<i>Last year, maybe 6. This year is 9. Last year before my second internship, I was less confident, because in that term I felt not very good because I made a relationship with my boyfriend and that made me not so focused with my studies. That time I did not want to write my reports, or write my assignments, just want to talk with him all the time. But this year, I still have my relationship with my boyfriend... I think I am more mature, I can control myself in the relationship, I think now, studying is more important.....because I am the most important focus now. I can separate my relationship with boyfriend and my studies. When I am studying I can study very hard. When I talk with him I can do that without forgetting everything.</i>

MOON	<i>5. I think my English was not fluent enough so I did not have much confidence. .... I only stayed with my Hong Kong friends.</i>	<i>7 or 8. I think I spent more time in English like I come here and I feel more confident. I have much more confident to talk to foreigner friend. Read more books, chatting with my foreigner friends and watching movies on Netflix in English.</i>
Rose	<i>6. I think</i>	<i>Maybe 7. You have to speak English all the time at school. But during my internship, I speak Chinese all the time, so maybe my English did not improve very much. After my internship, I think I might be more confident than before. I don't talk to strangers before and after my internship, I improved myself and I can speak to customers.</i>
Spring	<i>Half/half..... 5. After the exam, the school arrange some English class for us. Before summer I sat for the test. Then during summer, the school arrange for more classes then we sit for test again because depending on marks we can choose for Associate degree or degree level. But after exam, my marks were the same so I can only get Associate degree not degree level.</i>	<i>Spring: You mean just passing or having high marks? INTERVIEWER: I mean passing and graduating? Spring. 100% It is not difficult, just prepare and work hard and you can pass.</i>
Summer	<i>Ehhh....6-8. Because I feel I have room for improvement.</i>	<i>9. I am in the top 30% in my class because I am hard working. You know most of Chinese students they are hard working.</i>
Sunny	<i>Maybe 5.</i>	<i>7.,,... because in the Australian programme, our class are all taught by the foreigners. So my English improved a lot. And we also have group presentations and group reports, so we need to cooperate with each other, so I know some foreign students, and I have to familiar with them, communicate with them in English.</i>
Victor	<i>7 or 8.</i>	<i>9. There are a lot of presentation in this programme. So it forces you to speak English otherwise people won't get your ideas.</i>

This information collected (Table 4.4) is purely based on the individual participant's self-appraisal. At the time of the interview, all participants with the exception of Jasmine who was relatively new to the SAJVP, have had undertaken many different forms of assessments within the SAJVP. Therefore, they were in a good position to have a reasonable perception of their academic performance and class ranking. The following table consist of a summary of direct quotes from the participants' narratives.

**Table 4-4 – Participants' Self-Reported Perceived Academic Ranking**

<b>Participants</b>	<b>SELF-REPORTED ACADEMIC CLASS RANKING PERCEPTION</b>
Angel	<i>Maybe average, in the middle.</i>
Cherry	<i>I think amongst the top.</i>
Jasmine	<i>I am an average student. After 9 weeks study I become more skilled and professional and systemic for the subjects from Week 2- two assessment I got Pass, which is not that good, to Week 8, I got a Credit and a High Distinction, because I put 100% energy and effort to do that I can, no pain no gain right. The point is love what you do and know why and what you want. Genius equals education plus self-effort plus practice.</i>
Jason	<i>Maybe in the middle.</i>
Ji	<i>In the middle.</i>
Liling	<i>Actually I don't know. I hope I am the top 20%, but I think I am the top 50%.</i>
Lily	<i>About top 40%. Yes. I think my level above the average student. If there are 100 students, i think i will rank myself on 30-40.</i>
May	<i>Maybe in the middle. I am still working on it to be top 10.</i>
Mei	<i>I am learning here. Last year I failed my Research class, so this year I am redoing one class. In the middle.</i>
Moon	<i>I think I would rank myself above the average in class". Interviewer: "How about when you were studying this programme in Australia? How would you rank yourself there in your class? In Australia, I would like to rank myself below average in class.</i>
Rose	<i>average student ranking</i>
Spring	<i>I think my position is a little above than the average in the whole class..... there are a lot of international students in our school. Although I am a hard working girl, this is my attitude; it cannot help me achieve high grade.</i>
Summer	<i>Top 30% because I am hard working. You know most of Chinese students they are hard working.</i>
Sunny	<i>Top 30% because I am hard working. You know most of Chinese students they are hard working.</i>
Victor	<i>I see myself as above the average student. I am happy where I am now because if you want to get distinctions and high distinctions all the time, it really would take too much effort. I could do with that time for my hobbies and it is not all about exams and assignments. So if I really wanted to, then I would sacrifice the time that I waste.</i>

Festinger (1954), posits that people have a fundamental need to appraise themselves and their abilities and that they endeavour to have accurate and stable, evaluations of themselves. Furthermore, he argued that much as people prefer to use objective and non-social standards to make their self-appraisals, when objective information is not available, they would use social comparison. The classroom environment provides a wide ranging source of these vicarious experiences such as the reward system based on academic achievements, perceived teacher concern with academic performance and parental expectations to perform well at school, create an evaluative environment that induces students to make social comparison (Dijkstra, Kuyper, Van der Werf, Buunk & van der Zee, 2008).

In an extensive literature review conducted by Dijkstra et al. (2008) on social comparison and Dijkstra and her colleagues found that the studies conducted in classroom setting provided strong evidence to suggest that students prefer to adopt the upward comparison, meaning that the model is perceived by the observer to be better than them in the dimension they are making comparison and use lateral comparison on related or unrelated or unrelated dimension. Furthermore, the trend of findings that emerged from their studies also suggested that:

*“The ideal comparison target for students therefore seems to constitute a classmate who resembles them in age, sex, and possibly other related or unrelated attributes but who performs better than they do.” (p.853)*

In Table 4.4, eight participants reported higher academic performance than their initial inferred levels of PSE before their English Entrance Examination. This paradox is consistent with previous research. However, if one takes into consideration the general inferred increased in levels of PSE, especially on their

prospects of graduating on schedule (see Table 4.3), their self-reported inferred levels of PSE on graduation and perceived academic class ranking would suggest that they have improved in their academic studies and experienced achievements that helped enhance their PSE level. The findings here suggests that the participants were not deterred by their initial inferred low or average levels of PSE prior to their Entrance Examination and that they have invested effort to improve their academic performance even if they sometimes did not achieve the high grades that they would like. According to Jasmine, academic achievement is more than just grades:

*“I think, the grades is something you must pass. But not in the mind. In the mind, you have to learn something new so that you can satisfy yourself. Not just the exams, the test, not just what the teacher tell you to do, they give me a question, and I answer it. That is not academic success. That would be very boring.”*

Furthermore, indications of incremental ability mind-set (Dweck, 2006; Dweck & Leggett, 1988) could be found in the following narrative and in sub section 4.3.4 on Effort and Achievement (go to p.146)

JASMINE: *“You know Yin/Yang. I believe that.....no pain, no gain.”*

INTERVIEWER: *“Does that mean if you suffer a lot, you will gain something?”*

JASMINE: *“Noooo. Not suffer. But you have to make effort.”*

INTERVIEWER: *“Do you think that some things could be achieved with no effort? “*

JASMINE: *“No. You must do something then you can get what you want?”*

INTERVIEWER: *“What about people who are born smart?”*

JASMINE: *“I don't believe in born smart. The person born smart who got in at Tsinghua University at the age of 14, but before the 14, there are no news of*

*what happened to this child before the age of 14. There was also no news of what happened with his life afterwards. Did he really achieve something? “*

Jasmine's narrative here indicated that she does not believe in implicit or innate ability but rather that ability is incremental with effort. According to Dweck (2006) and Dweck & Leggett (1988), individuals with an incremental ability mind-set tend to have a more adaptive learning approach regardless of their PSE as the incremental belief of ability is understood that their ability is amendable with effort regardless of their PSE.

Table 4.4 also shows that there were also four participants who inferred a lower academic class ranking than their PSE before they started the programme and their reasons provided were:

Jason: *“Last year, some of my grades are C for Credit and if the high point is High Distinction and low point is Fail, actually, I have already satisfied my grade because I am Chinese. Of course, I cannot feel good when I get Credit grades. I also want to get Distinction and High Distinction, but I have already tried my best to pass the exams. So, I am very satisfied with my grades.....I tried my best to get Credits and I got Credits, so I am very happy.”*

Jason's response to why there is a drop in his academic performance, reflected by his self-reported academic class ranking when compared with his inferred academic PSE prior to starting the programme, suggests that although he was very confident that his English proficiency would gain him admittance into the SAJVP, it does not necessary reflect that he perceived himself as an above average student academically when compared with his fellow classmates. Although he was

not achieving high grades such as Distinctions and High Distinctions, he was satisfied with his academic performance with Credit grades. Moreover, although Credit grades generally reflect above average performance, Jason viewed them as average. This suggest that he perhaps perceives his academic performance as not being as high as some of his classmates. Moreover, to be achieving Credit grades yet be considered as an average student in the class also implied that the class environment is very competitive with many high achievers.

Jasmine: *“The reality check. The textbooks and the assignments are not easy. Misunderstanding all the time about what the teacher said, and what the question is.”*

INTERVIEWER: *You mentioned in earlier that there has been a drop of self-confidence since you started the SAJVP compared to before you started due to reality check. Now that you have had time to adapt, how would you rate your self-belief in your academic abilities now?”*

JASMINE: *my self-belief in academic is 100% because science and logic things are most easy thing to tell. I look for the answer to the why, every day, need learn things deeply. I build my self-cultivated; self-development habit, from two things, one is keep writing two kind of diary for work and personal life; emotion; feelings.*

Jasmine is a direct entry student, and, at the time of the interview, she had only spent a month on the SAJVP programme. She transferred from a university in Beijing because she wanted to study hotel management. She exuded confidence in the interview and explained that, although she was not a senior student on the SAJVP, she wanted to involve herself in this study as the topic of ‘self-belief’ was of interest to her. Jasmine’s highly confident demeanour reflected her high inferred



level of PSE in academic studies and possibly that she did not enter VE by default but rather by choice. However, she was candid enough to admit she felt challenged once she started her studies in the SAJVP and that she over-estimated her academic PSE. Nonetheless, looking at her inferred level of PSE for graduation, her self-reported 'average' academic class ranking did not seem to affect her EB in being able to successfully complete her programme of study despite the initial setbacks coping with her studies.

Mei: *"Last year before my second internship, I was less confident because in that term I felt not very good because I made a relationship with my boyfriend and that made me not so focused with my studies.....But this year, I still have my relationship with my boyfriend, but I think I am more mature. I can control myself in the relationship. I think now, studying is more important because I am the most important focus now. I can separate my relationship with boyfriend and my studies. When I am studying, I can study very hard. When I talk with him, I can do that without forgetting everything.....last year my self-belief in graduating was average but this year it is very high.....Last year I failed my Research Methods class, so this year I am redoing one class."*

Mei failed two subjects in her final academic term, which was described earlier by her as the time she lost focus on her studies after she started a relationship with her new boyfriend. The loss of focus impacted on her academic performance despite her inferred high level of PSE. She had to return to retake the two failed subjects so that she could graduate from the SAJVP. Her account suggests that, not only is she self-aware of her actions, but she also expressed her

ability to exercise self-regulation to control her focus once the cause of her failure was recognised.

The overall self-reported inferred levels of PSE and perceived academic class ranking suggest that the participants are aware of their academic performances. The supporting narratives also gave no indications of any humility in their self-appraisals of PSE as suggested in the study by Ahn et al. (2016). There were also indications such as with Jasmine and Mei displaying overconfident behaviour whereby their academic results did not match their inferred high levels of academic PSE. However, these two participants also reported their abilities to adjust their overestimations once they realised the miscalibration.

Indications from this present study are that the participants in general inferred relatively high levels of general PSE about themselves. Table 4.5 shows a summary of how the participants responded to the question “how much do you believe in yourself or your capabilities in general?” With the exception of Jasmine, there were a few participants who inferred a higher self-belief in comparison to their self-confidence.

The findings also suggest that the term self-belief is understood by many of the participants as trusting in oneself or self-trust, and that it is a feeling.

Interviewer: *“Is there a Chinese term for this self-belief? A Chinese expression?”*

Angel: *“Yes, it means trust yourself.”*

Lily: “first you must have trust in yourself that you can do it. Because if you don't belief in yourself then you also cannot do things so good. People in your surrounding is also very important. ”

**Table 4-5 – Participants’ Self-Reported Inferred Levels of General PSE**

Participants	Self-Reported Inferred levels of General PSE
Angel	Maybe 80%.
Cherry	<i>I think 80%</i>
Jasmine	<i>Now? Now is 100%. Self-confident is 100%, but self-belief is 80% because I am human being</i>
Jason	<i>If I believe in myself that I can do it by myself, I will say 100%</i>
Ji	<p>INTERVIEWER: So on a score of 1-100%, one being the lowest and 10 being the highest, how would you rate your self-confidence or self-belief level now?</p> <p>Ji: Now? 80%.</p> <p>INTERVIEWER: What do you think needs to happen to change your self-confidence or self-belief level to a 100%?</p> <p>Ji: Maybe after graduation when I am working in different situations.</p> <p>INTERVIEWER: And before you discovered that you are very good at hosting, how would you rate your self-confidence or self-belief level from a score of 1-100%?</p> <p>Ji: 50%.</p> <p>INTERVIEWER: And this change is over how long?</p> <p>Ji: Maybe 1 year.</p>
Liling	<i>60%. Ummmm..... Maybe 80%. I believe myself if I can control my laziness, I will be better and better.</i>
Lily	<i>60%. I have my own ideas but sometimes I don't know if I am right or wrong.</i>
May	<i>How much? Ummm... 100%. And in my eyes, you can't be afraid. If you do something wrong, you will not have the courage to do again because you are afraid to fail again. But for me, I trust myself.</i>
Mei	<i>65%</i>
Moon	<i>I rate myself confidence is 70%, my self-belief is 80%</i>
Rose	<i>60%</i>
Spring	<i>Probably 60% confidence but self-belief – 70%. Still sometimes, I would still be not confident just in the beginning until I do it. Usually once I begin, I can do it.</i>
Summer	<p><i>It can make me belief, if I work hard, I will get success.</i></p> <p>INTERVIEWER: How much can it make you belief?</p> <p>SUMMER: 100%.</p>
Sunny	<i>I would rate myself 60%. To be honest, I have much pressure recently. Final exam will be coming, but I am not ready to face it.</i>
Victor	<i>80%</i>

#### **4.1.1 Summary**

The findings suggest that the participants' self-reported inferred levels of PSE indicated that their inferred levels of academic PSE prior to admission into the Australian component of the SAJVP were lower than at the time of data collection which was a year after they have entered this course of study. The participants' narratives indicated that EB is important for success and that their inferred levels of PSE have been enhanced over this period as a result of proven ability to cope and succeed with not only the academic demands of the programme, but also through their mastery experiences during their internship in industry. In the following section, sources of self-efficacy will be discussed in detail.

## **4.2 Research Question B - Are the self-reported sources of self-efficacy consistent with Bandura's (1997) four hypothesised sources of self-efficacy, namely: mastery, vicarious experience, social encouragement and physiological & emotional status, or are there other self-reported sources of self-efficacy identified?**

A key focus of this study was to explore whether the participants' sources of self-efficacy are consistent with Bandura's four hypothesised sources and whether there are other sources of self-efficacy that influenced their PSE. The findings indicated that the sources of self-efficacy discussed previously are consistent with Bandura's (1997) four hypothesised sources. Although relational efficacy was not discussed in the literature review, this extension of Encouragement by Others source of self-efficacy is not new and has been discussed in Bandura's work as relationship between persuaders and recipients. The term relational efficacy was introduced in reference to studies by Zeldin and Pajares (2000) and Lent and Lopez (2002) in particular.

### **4.2.1 Sources of Self-Efficacy**

According to Bandura (1997), PSE are constructed from four key sources of information namely mastery experiences; vicarious experiences; social persuasion or encouragement; and physiological and emotional status. These information are important sources for assisting the individual in judging his/her personal capabilities. They are informative only through cognitive processing and through reflective thought. In other words, it is necessary to differentiate between information conveyed by events that one experienced and information that one selected, weighted and

integrated into one's PSE judgement. The findings from this study showed that sources of self-efficacy work both ways, in that they can enhance as well as undermine one's PSE. This finding is consistent with Bandura's (1997) SET. The sources of self-efficacy reflected in the participants' narrative of their learning experience indicated that Bandura's (1997) four hypothesised sources of self-efficacy were prevalent.

#### **4.2.1.1 Mastery Experience**

This source of self-efficacy is considered most robust as successful achievement experiences provide the most authentic evidence of one's ability (Bandura, 1997). Mastery experience has also been consistently reported in previous research as the most important source of self-efficacy for study participants (Tschannen-Moran & McMaster, 2009; Usher & Pajares, 2008). Bandura et al., (1977) explained that, because our prior mastery experiences provide us with actual and reliable indications of how competent we are or whether we possess whatever is needed to achieve in a specific endeavour, mastery experiences develop within us a strong sense of confidence in our ability.

The findings indicated that participants' successful experiences, such as the achievement of good grades or winning inter-institutions speech or writing competitions, were effective in enhancing their sense of PSE in their academic abilities. For example:

Cherry: *"I have entered Chinese writing competition as my Chinese teacher ask me to do this. I have three time the certificate of the competition."*

Lily: *"In my last term, my communication marks are very high – distinction and distinction for my cross-cultural communication. This let me believe I can also do well, not just the good students".*

Sunny: *"When I entered the BM programme, in the first year, we need to learn some very difficult lessons like accounting, marketing, management etc. We need to finish the reports and the reports has so many words. I have never written so many words in English and I thought I can't finish it. And the time is very short, and we must always write, write, write. But when we finish and get a good grade, I would say 'Oh, I can do it, it is not a big deal!'"*

The comments by Lily and Sunny also suggest that their achievements were the result of their ability to copy well with their studies either by performing just as well as the 'good' students in Lily's case or through practise and perseverance in Sonny's case. In the case of Cherry, mastery experience in the form of gaining recognition in a competitive environment helped enhanced her EB. Her comment could also be interpreted that her teacher believed in her ability inferring positive social encouragement strengthened by mastery experience. Although the findings on mastery experience are mostly consistent with previous research in confirming that mastery experience is effective in enhancing PSE, this study also found that for one participant in particular, mastery experience was not considered to be reliable in enhancing her PSE, especially when she has worked very hard, but either saw no improvement or failed in her performance. For example, Moon was in competitive swimming from the age of 9 until she gave it up at the age of 20. She described these experiences as:

*"...it is like, success does not mean anything. Sometimes, I have seen like success does not last long. So, I have to build it up again and again."*

She gave up competitive swimming when she reached a stage when she could not improve her performance despite rigorous training to stay competitive enough to win. Her decision to give up was not a spontaneous one as she persisted for two years with her training. She said:

*"...my heart says if I can't improve my results in two years, I should give up."*

Her failure to improve her swimming ability made her lose much of her self-belief in a sport that she thought she was competent in. She described her failure to achieve good results despite investing much effort as being like a lie:

*"...ahhh...it is like lying to me. I don't have so much confidence. I will not believe in myself if there is no improvement".*

Moon's experience with mastery experiences in a competitive environment indicated that individuals who have achieved high performance in a competitive environment would increase their PSE if their subsequent mastery performances have also maintained their high level of achievement, such as winning competitions or being amongst the top performers or having improved from their previous performances. Failure to do so would reflect a lack of growth or even regression in performance capabilities and subsequently raise self-doubts in the individuals' PSE. In Moon's situation, her mistrust of mastery performance was also compounded by her discovery that her English language was not proficient enough for her to cope with her studies in Australia. Moon related that, prior to going to Australia to further her studies, she was confident with her English proficiency as she had passed her IELTS (International English Language Testing System). She also reported that her English language proficiency was considered amongst the best in her class at Secondary School in Hong Kong. Therefore, the discovery of her inadequate proficiency in English to understand and cope with her classes in Australia



compounded her distrust of her mastery experiences. After she transferred her studies from Australia to China, Moon found her learning environment to be more conducive - with teachers who are more empathetic to teaching ESL (English as a second language) learners, including making more effort to use different ways to explain course content to increase student understanding. The learning environment in China reduced her feeling of incompetence about her English proficiency. She said:

*“Studying in Australia, the teachers lecture like they think we understand much more than what they are talking about. But here, the teachers take time to explain things more carefully and it makes me feel that here it is much better.”*

When students travel abroad to further their education, often there is a period of adjustment to the social, cultural and learning environment, and Moon found the adjustment to the learning environment in China much easier than that in Australia. There were other factors in the Chinese learning environment that also contributed to her adaptation. These included her speaking more in English, even with her Chinese classmates. She also felt that her English was comparatively better than her classmates on the SAJVP. Moon related that, when she was studying in Australia, she only mixed with her classmates from Hong Kong who spoke Cantonese amongst themselves, as she relied much on their help with her class work. Moon also expressed her awareness that she always had to work very hard to achieve success. In her mind, always having to work hard also represented a lack of ability. She said:

*“... It feels like it is failing because you had to study hard”.*

As an athlete, Moon also grew up in a very competitive environment from a young age. The need to outperform one's peers is common as, unless one is amongst the top three prize winning positions, one's mastery achievements are considered inadequate. In their study on sources of self-efficacy in springboard and high board diving, Pattinson, Cotterill and Leyland (2017) found that a competitive environment had detrimental effects on some participants, whilst others are highly motivated in such an environment. Their study also found that this motivational effect to outperform their peers was not uncommon (*see 4.1.1.2 Vicarious Experience*) despite the positive and negative impacts of competition amongst teammates and other competitors.

Despite what Moon regarded as 'failure experiences', she set herself 'above average' academic goals.

Interviewer: *"What does academic success mean to you? Passing, good grades or good academic ranking in class?"*

Moon: *"Good grades."*

Interviewer: *"What are good grades to you?"*

Moon: *"Credits and Distinctions?"*

Interviewer: *"Do you aim for that all the time?"*

Moon: *"Yes. I don't just want to have Passes."*

Interviewer: *"Why is it so important to have Credits and Distinctions?"*

Moon: *"For me, it is like, if you put so much effort, this study is my baby, and if you have good grades, it would be like a part of you if you get the good grades."*

Her self-reported inferred level of general PSE and her inferred level of PSE for graduation (see Table 4.3), suggested that she held a relatively high sense of academic and general self-belief. They also indicate that her previous successes that have helped form her self-belief are still present, even though she was unsure of achieving the lofty goals she set for herself. Bandura (1997) purported that:

*“Self-beliefs that have served a protective function for years are not quickly discarded. People who doubt their coping efficacy are more likely to distrust their success experiences than to risk more involving encounters with threats they doubt they can adequately control.” (p. 83).*

One could perhaps draw from Moon's case that her prior success protected her from losing major self-belief in herself. Otherwise, she would not feel that she could always do better by setting 'above average' academic goals. There were also indications from her narrative that, even when she doubted her ability and mistrusted her mastery experiences, she trusted her ability to persist and work hard as these have yielded positive results previously, albeit not placing her amongst the top achievers. As a practitioner, one sometimes encounters students who are never satisfied with their achievement unless they perceive themselves to be amongst the top performers in their class.

Another interpretation of Moon's perceived inconsistent mastery experiences could also be because of her frequent experience of self-doubt. Research on the power of EB over physical efficacy in athletic performance indicated that PSE contributed to resilience against the negative impact of defeat (Highlen & Bennett, 1983; Mahoney, 1979; Weinberg, Gould, & Jackson, 1979). Their findings showed that talented athletes who are beset by self-doubts perform well below their potential;

whereas less talented, but highly self-efficacious, athletes can outperform more capable competitors who distrust their capabilities and achievements

#### **4.2.1.1.1 Difficulty Level and Achieving the Impossible**

Twelve participants reported that the more difficult or challenging the task, the higher the effectiveness on their sense of accomplishment and EB development. This indicated that the degree of difficulty in mastery experience has significant influence on their self-efficacy judgment. For example:

May: *“When I go to the BM, the classes are quite difficult actually, and I found when I finish one assessment or one report that is very difficult, I feel very proud of myself and I have more courage.”*

May’s comment suggested that mastery experiences in small steps by way of progressive assessments helped to give her courage and incrementally enhance her EB.

When successes were achieved with ease, the strength of EB enhancement was insignificant, especially if their classmates also considered the same activity to be easy. For example:

Victor: *“...if it was hard, it helps. But personally, I prefer the easy way...It proves that you have worked hard...If it was easy and a lot of people said it was easy and you make the distinction...no wonder nobody said that you are good at it because it is easy for everyone. Therefore, the hard way makes me more confident.”*

Victor’s comment here suggest that when an activity can be accomplished with ease, it indicates that he has previously acquired that knowledge and also infers

that he has stronger abilities than his classmates especially if they found the same activity difficult. His comment also indicated that challenging activities are stronger at EB enhancement than easy activities.

This finding is consistent with Bandura's (1997) postulation that, as individuals become better at foreseeing and dealing with potential threats and that they also cultivate a strong sense of competence that helps them in the mastering of new challenges. According to Bandura (1997):

*"The self-diagnostic value of successes and failures for judging personal efficacy will depend on the perceived difficulty of a task. To succeed at an easy task is redundant with what one already knows and, therefore, does not call for any efficacy reappraisals. Mastery of difficult tasks, however, conveys new efficacy information for raising belief in one's capabilities."* (p.82)

Amongst the participants who expressed that difficulty level of tasks influenced their level of EB enhancement, three participants reported that the highest degree of EB enhancement comes from *"achieving the impossible"*.

Rose:               *"... the more difficult the better. I like being challenged...if I can solve impossible problems, I will feel more confident..."*

Ji:               *"... to achieve the goal that is impossible for me, for example, like last term, my Accounting subject. I think I would fail 100%, but I passed...my report and presentation marks were not good, and I needed at least 85 points to pass, but I did it...the feeling is amazing when I did this!"*

Victor:               *"If I try and succeed in everything that I am scared of or that I wouldn't normally do, then it will make me believe that there is possibly nothing in this world that I cannot do."*

These participants also reported that failure to achieve such highly challenging activities would not have any negative impact on their PSE because they did not believe they had the ability to succeed in the first place. However, their attitude was that there is no harm in trying. According to Brown and Inouye (1978, p. 901),

*"...when people expend high effort and fail to affect outcomes by their actions, they are inclined to judge the task impossible, at least for them."*

Therefore, one could deduce that some individuals are willing to attempt activities that are far beyond their EB as there would be nothing to lose if they fail and much to gain should they succeed.

This study found that some participants also pushed themselves to attempt activities in which they had low levels of PSE when they had no choice. These situations were reported by Angel, Sunny and Victor. In the case of Angel, during her internship she found herself in a position whereby she was the only one on duty and had to serve the guests for the first time without supervision. She recalled feeling scared but felt that she had no choice but to perform her duties independently. She said:

*"If I have no choice. I needed to finish these things I have to do. So, giving up is not possible."*

In the case of Sunny and Victor, they both reported their lack of PSE in Maths and Accounting because of their earlier school experiences. However, they needed to pass every subject, including Accounting, to graduate.

Sunny: *"...I hate Accounting...I hate Maths...I don't like it from my primary school, but I need to do it because I need to graduate."*

Victor:       *“If I am thinking like Accounting being a compulsory subject to do, I would not be afraid, because I have to do it whether I like it or not. However, if it is not compulsory and I have a choice not to do it, then I might not...”*

Although PSE influences the choices people make (Bandura, 1986a), the findings from this study indicated that individuals might be persuaded to attempt something they would not normally do if put in a 'no choice' situation. Similarly, if the achievement is crucial to the overall success, such as graduating from their programme of study, individuals would also invest whatever effort is needed to increase their chance of success. These behaviours of attempting the impossible and attempting a feared activity, because there are no alternatives, could also be interpreted with the revised theory of fear appeals and attitude change which combined protection motivation and self-efficacy, developed by Maddux and Rogers (1983). Their studies found that, when people are confronted with a threatening situation, they would weigh up what is at stake and choose between a precaution strategy and a hyper-defensive strategy. For example, individuals who believed that they would be adversely affected, such as failing to graduate, tend to choose the precaution strategy such as changing course major, to prevent exposing themselves to the danger. Whereas individuals who assessed that they have nothing to lose and much to gain by trying, or that they have 'no choice', tend to choose the hyper-defensive strategy: which is to do whatever it takes regardless of whether they think the coping response will be effective. The hyper-defensive strategy was also found to be adopted as an anxiety reduction strategy or as a danger avoidance strategy (Maddux & Rogers, 1983). In the cases of Sunny and Victor, they needed to pass

Accounting, a subject they did not feel competent about but had no other option. Therefore, they had to do whatever it takes to pass that subject.

#### **4.2.1.2 Vicarious Experience**

This source of self-efficacy information refers to the building of EB by observing others' performances and using their observations to gauge one's own capabilities. People use social comparison frequently to appraise their performance, especially when they are unable to measure absolute adequacy. For example, students typically compare their course grades with their classmates, especially with those classmates who they perceive are of similar abilities, to gauge their performance.

Twelve participants in this study reported that, if they observed a fellow classmate or colleague of similar abilities as themselves achieve success with a task or subject area, it would boost their beliefs that they too can accomplish the same, indicating a general trend that vicarious experience is positive in enhancing PSE when the comparison is made with similar others and produces positive self-evaluation. For example:

Liling:       *".... if my classmate can do it, I can do it too. I will think, why I can't do it. If they can do it, I can do it too. It will make me feel confident...because I want to know my ability, no matter whether I am the best. I think if others can deal with it, I can deal with it too, even though not the best."*

However, this same situation could also serve to undermine or reduce the observer's level of PSE if they fail to achieve the same task. In the case of Mei, it is



not enough to be able to perform the same task that her classmate(s) demonstrated competency of, but she must be able to perform just as well in terms of level of competency to feel self-efficacious.

Mei: *“...it will make me feel a little bit upset. If we have the same classes and the same teacher taught us, and because of my own problems I can’t do it, but my classmate can...that makes me nervous and anxious. It is not like lose face. I would think is it my fault? Am I lazy? I would blame myself...”*

These findings are consistent with previous research conducted by Schunk (1987) that found that vicarious experience involving modelling by classmates who are considered like the observer was the most effective in raising self-efficacy in the observer. Furthermore, experiences of people perceived to have similar attributes such as age, gender, and ethnicity were also important influential comparative information. On the other hand, the effects of such a vicarious experience could also stimulate the observer to want to outperform their model. For example,

Cherry: *“Because I already see that my classmate can do it, I will do it even better than them.”*

Sunny: *“I am trying to do better than others. I will try my best to do better than other, pay more effort.”*

This suggests that, when competitive spirits are in play, vicarious experience provided a bench-mark for some participants to compare and re-evaluate their abilities and make them feel that perhaps they have the abilities to perform better than their classmates. There was only one participant – Summer, who indicated that vicarious experience would not necessarily make her feel efficacious. She said: *“because everyone is different”*.

Cherry was one of three participants who ranked their academic performance as amongst the top ten percent in her class (see Table 4.4). Her measurement of academic success (see Table 4.7) was also to be amongst the best in her class indicating high aspirations, self-confidence and competitive spirit. Even though Cherry inferred an average level of PSE for her English proficiency before the Entrance Examination, her perceived academic class ranking indicated that she believed that she possesses above-average abilities compared to her classmates, which affords her the belief that, with extra effort, she can outperform her classmates.

Sunny also reported that she strived to outperform her classmates. Her inferred academic class self-ranking was between above average and amongst the top ten percent in her class (Table 4.5). She inferred that she held an average PSE for passing the SAJVP's Entrance Exam and General PSE. Her inferred level of PSE for graduation was more aligned with her perceived academic class self-ranking (see Table 4.3 and Table 4.5), suggesting that she has made good academic progress and an increased level of PSE in the year since she started on the SAJVP. Sunny reported that she liked to learn from classmates who are very confident and have good communications skills. She said:

*"...so... I think I need to follow them and learn something good from them ...other students are very hard working, so you have also to work very hard to catch up with them, ... I am trying to do better than others, so I need to pay more effort..."*

Sunny's account indicated that, not only does she use aspirational models to provide her with the level of performance to work towards, but she also uses them as

a benchmark to evaluate her achievement performances. These findings are consistent with previous research by Bandura and Jourden (1991) and Goethals & Darley (1987), who found that observing the achievements of similar others can hearten or depress the observers, conditional upon how well they performed in the social comparison. Competitive comparisons with people who are viewed as better than themselves could bring about self-deprecation and despair, as demonstrated in Mei's case. Furthermore, some people do actively select models who they can learn from and have already attained what they aspire to become (Bandura, 1997). In addition, the competitive spirit demonstrated by some of the participants could be the result of the meritocratic nature of the Chinese Education System. This intensive examination system, that consistently selects only the top academic achievers for the top educational institutions in China, cultivates a culture of competitiveness. Therefore, to stay ahead of one's peers for the best education and future career opportunities, one must work hard to continuously outperform one's peers to secure the front runners' positions.

Although vicarious experiences occur amongst day to day associates such as classmates, friends and members of the family, students also have symbolic models introduced through television and other media (Bandura, 2004). This study found that some of the participants have role models such as actors, singers or high-profile people in the media, who influenced their ideas and behaviour. However, there were no indications from their narratives that their symbolic or aspirational models had any influence in enhancing their academic PSE or general PSE. It could be argued that these models helped them visualise a possible future or overcome difficult social situations. Bandura (1997) suggested that aspirational modelling guides and encourages self-improvement. There were ten participants who reported

that they have aspirational models who helped inspire them. Examples of such models mentioned were teachers, General Managers of hotels where they did their internship, television personalities, politicians, film actors and singers. These aspirational models typically possess certain attributes that the participants aspire to cultivate, such as being hard-working, having a mind of their own, leadership and innovative skills.

There were also five participants who did not have any aspirational models. Their main reasons given were that they wanted to be “original” and not be like someone else. There were no indications of any direct influence of aspirational models on their EB development. It was also found that, even when participants did not report having any aspirational models, their narratives provided information to the contrary. For example, one of the five participants who reported having no aspirational model, Cherry, talked about the influence of her parents and grandparents in her upbringing in another part of the interview.

Cherry:       *“To be honest, my parents and grandparents, they are not full of self-confidence. I didn’t see something that can show me their self-confidence. However, they never hesitate to do something they are sure of, maybe this is only thing they showed me in life.”*

This highlights that sometimes, one may not be conscious of the vicarious experiences that have influences our EBs until one consciously reflects on and evaluates where that belief came from.

#### 4.2.1.3 Social Encouragement

The people in the participants' social environment who had influence through social encouragement were identified as parents, family members, friends, teachers, supervisors/managers and colleagues they worked with during their internships. During the interview process, the participants were asked to rank the people who they considered as effective in helping them raise their EBs, in the order of effectiveness. The people who are included in the ranking were people that each individual participant talked about in their interview. The people who were most frequently mentioned were their parents, teachers and friends. Note that the ranking is self-reported and cannot be equated directly to a ranking that reliably and validity ascertains the relative influence of each of social encouragement.

**Table 4-6 Encouragement by Others and Influence Ranking**

Participants	Most influential	Above Moderately influential	Moderately influential	Least influential
Angel	Older Sister	Friend & Self	Teachers	-
Cherry	Teachers	Self	Friends	Parents
Jasmine	Parents	Coach	Friends	Self
Jason	Self	Parents	Teachers	Friends
Mei	Friends	Teachers	Supervisors/Managers	Parents
Rose	Parents	Teachers	Friends	Self
May	Teachers	Friends	Parents	Self
Moon	Parents	Self	Friends	Teachers
Victor	Self	Friends	Teachers	Parents
Lily	Father	Friends	Teachers	Self
Ji	Self	Parents	Teachers	Friends
Sunny	Parents	Teachers	-	-
Liling	Self	Nobody else gives her encouragement.		
Spring	Mother	Manager	-	-
Summer	Self			

Table 4.6 shows how each participant ranked the influences from the different social member groups, in their order of effectiveness in enhancing participants' EBs through social encouragement. These rankings are self-reported in

the interviews and indicated the order of effectiveness on their self-efficacy development. These rankings contribute to the understanding of how the participants weight information sources that enhance EBs. For example, In Angel's case, her older sister played a key role in the provision of encouragement both for her studies and social matters.

ANGEL: *"Sometimes she is like my mother. She will give me some advice on the telephone. She will encourage me to try somethings that I am afraid of doing."*

For Jasmine, her coach at Sports School played an important role in encouraging her to believe in her abilities to become an Olympic qualifying wrestler even though she ranked her parents as the most important in social encouragement. Here's how she differentiated their influences.

INTERVIEWER: *"In terms of the influences on your self-belief, can you rate amongst the following people: your parents, teachers, friends and others, who is the most important, second most important etc..."*

JASMINE: *"1. Parents, 2. Teachers, 3. Friends then myself."*

INTERVIEWER: *So your parents are the most important in influencing your self-belief?*

JASMINE: *"Yes, because your parents are your first teachers you met from the time you were born.....I say this as a whole, not in that moment. If a person is born and grow up, it is the parents are the first teachers."*

JASMINE: *"You mentioned the most important person in your life like the mentor..... it is the coach that is better than the teacher in the class. I really really believe the coach, like in the basketball, team, and soccer team. They are also teachers but they are called coach because they are different*

*from teachers. So if every teacher can become coach, children can achieve more, more and more. Because my self-confidence, self-beliefs, my skills are developed by my coach. Little by little.”*

The above findings also indicated that the participants' weighting on the effectiveness of the persuader are dependent on the situation. The findings also suggested that the effectiveness of social encouragement depended upon how the individual participant perceived the value of their relationships with their social persuaders. There were no indications that all authoritative figures are effective as social persuaders. Seven participants ranked their parents' or family members' encouragement to be the most influential in enhancing their self-efficacy. This is followed by five participants who perceived 'self-encouragement' was the most influential. Two participants ranked teachers as the most influential and only one participant considered friends as the most influential in terms of social encouragement.

According to Lent & Lopez (2002):

*“....though often overlooked, form of social support, namely, the sustaining power of having important others who believe in one's capabilities. Indeed, it is largely through their interactions with significant others that people come to develop a sense of their capabilities, or self-efficacy, at diverse activities. And when they are beset by adversity or self-doubt, people often look to their significant others for assistance in restoring their faith in themselves, or for assurance that they will be able to cope with or surmount the obstacles they face.” (p. 256-257).*

#### 4.2.1.3.1 *Encouragement by Parents and Family Members*

The findings here indicate that, amongst this group of participants, family members and self are more influential in social encouragement than people outside the family unit. Here are some of the reasons given by the participants why family members are most influential in social encouragement:

Jasmine: *“...because your parents are your first teachers you met from the time you were born.”*

Jason: *“...they are my parents, they will not want me to be bad, they always want the best for me...”*

MEI: *“It is because parents are always full of supportive, believed and motivate me that influence my self-confident...”*

The findings also showed that not all parents were effective in social encouragement, as observed in Angel’s case.

Angel: *“...my parents won’t say don’t worry, you can do it...they always say, if you don’t try your best at school, in the future, you will end up sweeping floors.”*

One could interpret from this narrative that Angel’s parents did not use encouragement in the positive sense to encourage her to apply herself academically but, nevertheless, the narrative indicated that they do care about her future success. Angel mentioned an older sibling as more influential than her parents. Angel reported that her parents always adopted negative encouragement by criticising or threatening her, which only served to demotivate her, as in the example above. Whereas, her old sister was more like a mother figure to her:



Angel:           *“...she will give me some advice on the telephone. She will encourage me to try some things that I am afraid of doing”.*

Angel's parents used a fear strategy to try to motivate her, and this form of motivation strategy was described by Higbee (1969) and Rogers (1975) as the fear appeal – a type of persuasive communication to affect behaviour change. It is also used generally to try to warn someone against adverse outcomes should they persist with an undesirable behaviour or practice. According to Higbee (1969), using persuasive communication that arouses high fear was found to be more effective than low fear arousal messages and conditional upon the high fear arousal message being perceived as credible by the recipient. Studies by Maddux and Rogers (1983) with undergraduate smokers on the effects of fear appeals on persuasion indicated that people's responses depended on how much they evaluated the probability of the threat occurrence: the higher the likelihood of threat realisation, the higher the intention of behavioural change. But they also found that this fear communication is valid only with people who are low in PSE.

In Angel's situation, even though she understood that her parent's threat was meant as a form of caution for her to work harder to secure a better future for herself, it had the reverse effect on her. She said:

*“...I think when they say these bad words, this does not encourage me. It let me be not confident.”*

As previously reported, Angel did not infer holding a high level of PSE in her academic performance. However she also inferred having high belief (80%) in

herself and iterated the importance of having self-belief as captured in explanation of why fear appeal persuasion quashes her confidence.

Angel:       *“...everyone comes to the world not to live for the other people, but to live for yourself. If you don’t believe in yourself, how can you do something that you want to achieve?” and “...because I want to improve myself. Confidence is important.”*

Some participants reported that their parents were not able to understand their academic needs because of their poor education background and lack of English language. Nevertheless, participants recognised that their parents can offer encouragement in non-academic matters. For example, in the case of Cherry, even though she ranked her parents as least influential in social encouragement for academic work, in the event of self-doubt, she would turn to her parents first;

Cherry:       *” ... I would choose my parents because they have always been with me and they know me well. They will be able to give me the important information to support me.”*

Some participants mentioned that encouragement from parents may be provided in nonverbal or non-direct form. For example,

Summer:       *“... When I am writing my report in my own room, my mum would come and see me and ask me ‘would you like to eat or drink something’ and take some food to me.”*

Ji:       *‘...yes from my mother, just some sentences to remind me to finish my homework on time. She sometimes gives me some gifts or pocket money on WeChat.’*

These accounts suggested that the participants perceive the parents' nurturing actions as a form of encouragement, support to their studies and vested interest in their achievements.

#### **4.2.1.3.2      *Encouragement by Self***

There were five participants, namely Jason, Victor, Ji, Summer and Liling, who reported self-encouragement as most influential (see Table 4.6). Self-encouragement is not featured in Bandura's (1997) SET. It was interesting to note that all three male participants in this sample group chose themselves as the most influential source of encouragement in raising self-efficacy. Jason's and Victor's reliance on self-encouragement may be the result of both having lived away from their parents since childhood and having to rely much on themselves from a young age.

Jason:            *"My parents left me with my grandparents when I was two years old...when I was studying in a primary school in Suzhou, it was not easy to meet them because they were in Shanghai. So, we must always call on the phone. Maybe we are very different from other people's children with their parents..."*

Victor:            *"...when I was young, I was adopted by others. I was put in another family to raise me up, not with my parents because they were busy. So, I was living with another family, and it made me think that I am not the centre of that family because they are not my parents...I was with them ...for whole 12 years...I am independent because I feel I cannot depend on others..."*

In China, it is not uncommon practice for parents to leave their children with the grandparents or relatives to seek employment in another city or province. According Duan, Lv & Zou (2013), the number of left-behind children in 2010 was about sixty two million (62 million) rural children, representing over twenty-two percent (22%) of all the Chinese children age seventeen (17) or younger. Although Suzhou is not considered rural China, parents from non-rural areas in China also do leave home to other cities to pursue employment. Research findings on the impact of parental migration and left-behind children have produced mixed results. Parental migration has been found in to be negatively linked to physical health conditions (Song & Zhang, 2009; Wen & Lin, 2012), school engagement and academic achievement (Wen & Lin, 2012), emotional well-being (Gao, 2010), and psychosocial functioning (Jia, Shi, Cao, Delancey & Tian, 2010). However, studies conducted by Su, Li, Lin, Xu & Zhu (2013) found positively association to high levels of loneliness. Negative impacts on left-behind children found in other studies ranged from problem behaviours (Fan, Liu, & Liu, 2009) and anxiety and depression (Liu, Li & Ge, 2009). Insignificant study results were also found to be associated with school satisfaction and happiness (Su et al., 2013; Zhou, Gao, Sun & Luo, 2011), educational status (Lu, 2012), Physical health (Jia et al., 2010) and personal well-being (Zhang, Tang, Hu & Xu, 2006). There were also benefits and positive impacts found on left-behind children's development such as self-concept, academic attainment and educational outcomes (Chen, Huang, Rozelle, Shi & Zhang, 2009; Hou, 2014; Leng & Park, 2010; Morooka & Liang, 2009). As one could deduce from the mixed results from these studies, this is a complex and varied issue that warrants further investigation. Nonetheless, the effects of parental migration seems to have cultivated a sense of self-reliance on Jason and Victor.

However, in the case of Ji, he did not mention that he is a left-behind child. When asked why he ranked himself first regarding social encouragement, his response was: *"I don't know why, but I just know"*. During his interview, he reported that he has a 'stay at home' mother and his father works as a driver. There was no mention of his father other than his occupation inferring that his father could be away on driving assignments frequently, so he had to be more self-reliant to take care of his mother.

Summer and Liling also chose self-encouragement as the most effective in enhancing their PSE.

Summer: *"...because if you do not want to study, everyone cannot help you. So, if you want to study, you can do it better. It depends on yourself."*

Liling: *"I want to prove to myself that I can do it. Maybe not the best, but I will finish it well. ....I want to try everything...The biggest advantage is to live the life of your dream. It is my favourite sentence. Nobody gives me encouragement to believe in myself."*

The two comments above from Summer and Liling inferred that ultimately, if they want to succeed in anything, the impetus has to come from within themselves. Their comments also inferred that they possess a sense of personal agency and control of their personal achievements.

These findings are also consistent with studies by Crundall and Foddy (1981) and Webster & Sobieszek (1974), indicating that individuals turn to themselves for self-encouragement if they do not perceive there are others who they could turn to or trust to provide them with support when help is needed. It is also possible that Jason,

Victor, Summer and Liling perhaps believe that they know themselves and their own predicament best, and that self-encouragement is the most reliable way to mobilise themselves to succeed with their studies.

According to Bandura (1997),

*“Differences between personal and social appraisal of efficacy raise questions about whose judgements are more accurate. Most people believe they know themselves and their predicaments better than others do, and this belief creates some resistance to social persuasion. The impact of persuasory opinions on efficacy beliefs is apt to be only as strong as the recipient’s confidence in the person who issues them. The more believable the source of information about one’s capabilities, the more likely are judgments of personal efficacy to change or be held strongly....”*

For example, when Ji was talking about his internship experience, he mentioned how much he admired the leadership style of the general manager of the hotel he was working in. In response to the following question:

Interviewer: *“Consider the situation when you have to do something challenging or difficult that you have not done before. Your classmate who has the same abilities as you, shows that he could do this challenging task. Does this make you feel confident that you can do it too?”*

Ji: *“I think if this manager told me to do this, then I think he believes in me, that I can do it, so I will not be afraid of this kind of things.”*

This indicates that ‘relational efficacy’ is important to him, despite his stronger reliance on himself for encouragement.

#### **4.2.1.3.3      *Encouragement by Teachers, Managers and Coaches***

As a group, the findings indicated that the participants considered teachers, managers and coaches as second most influential sources of EB development after parents and family members (see Table 4.6). Teachers, managers and coaches are probably considered as more credible people in a formal social environment, as they are recognised experts in their profession. The significance of relational efficacy between students and their teachers have been gaining empirical attention in the literature (Baker, Terry, Bridger, & Winsor, 1997). Research by Pianta, Steinberg & Rollins (1995) has found that positive teacher-student relationships are linked to behavioural competence and better school adjustment. The following are examples of how teachers, coach and managers influence some of the participants EB development.

*May: "...I think the most important one is when the teacher says I can do it, especially sometimes when I finish one report and the teacher says 'it is a very good job'..."*

May's comments indicated that in her case, it is important for her to know that her teacher believes in her and provide her with the appropriate feedback as a form of encouragement when the work is done well.

This highlighted the importance of teachers' encouragement through positive feedback on assessment, as the quality of May's work impacted on her PSE relating to her performance.

In Cherry's case, teachers who are more readily available than absent parents can provide the support and encouragement for academic studies needed.

Cherry: *"...my parents have their work and they do not have much time to talk with me, Except for myself, the teacher could always be there. So, the teachers are the most important."*

The study also found that negative experiences with teachers also impact on the credibility of teachers' social encouragement as well as their future encounters. For example, Moon reported that, when teachers' general attitudes reflect that they do not care about the students' welfare, their encouragement cannot be taken seriously.

Interviewer: *"What about your school teachers?"*

Moon: *"Cannot compare with my friends and my parents."*

Interviewer: *"So the teachers don't really encourage you?"*

Moon: *"Yes, they do, but it feels really awkward."*

Interviewer: *"So you don't really believe them?"*

Moon: *"No, not really.....like less.....They don't really care about us."*

Interviewer: *"How do you know that your teachers don't care about you?"*

Moon: *"Like their attitude."*

Interviewer: *"How does that make you feel as a student?"*

Moon: *"I feel in-charged."*

Moon's last comment that she felt 'in-charged' suggests that, when teachers do not pay any special attention to her academic success, it makes her take responsibilities for her own progress. This interpretation takes into consideration that Moon was in competitive swimming for a major part of her life and, like



Jasmine, she would have received much individual attention from her coach/es who would have taken responsibilities for her whole training regime. Therefore, in Moon's case, not having the attention of teachers caring about her welfare possibly gave her a new sense of control over her learning.

In the case of Victor his comparative experience of the teachers' professional attitude on the Chinese and Australian components of the SAJVP below, provided insight into how students like Victor might evaluate the credibility of their teachers in social encouragement.

Victor: *"XTVI is more like a high school. You have classrooms and just must sit and wait for teachers to come and give you the lessons. But the Australian programme is more like university. You must come to lectures. In the XTVI, if it was not an important lesson related to your major, the teacher will not pay too much attention to the homework or quality of the lecture. Also, some of the teachers are coming from outside of XTVI, so they will care even less. There are also so many students in the class in XTVI. In the Australian programme, they have little workshops and the teachers don't feel rushed to finish the lesson and can answer my questions nicely."*

These accounts also suggested that, for teachers' encouragement to be of value, they need to model their behaviour to demonstrate their credibility in the eyes of their students. In the case of Liling, her narrative also demonstrated that when students lose the trust in a teacher's credibility, it could also affect their future relationships with their teachers.

Liling: *"When I am the level one of middle school, my class teacher said to me 'you look like a clever girl, but so stupid I think.' All my*

*classmates sat in the classroom and I wanted to cry at that moment.*

*Because she saw I copy the homework. I was so shy in 12 years. Actually, I did not. The homework which I have written when she saw me belongs to the girl sitting behind me. She wanted me to help her to copy others' homework because she didn't want to show something bad to teacher. After class she said the truth to class teacher and I didn't have any apologies. Curiously, teacher didn't blame that girl. I think it is okay for me now. But I don't know maybe I am not very confident 'cos this happened."*

Sometimes the strength of this form of social encouragement can be seen in an action as simple as the teacher or manager selecting a student to do a task. For example,

*Jason: "...if the teacher just asks me to do something such as a presentation, just me, then I feel maybe it is a good thing for me. Maybe then I can handle it. It would not be a bad thing for me, ...so I will cherish this chance."*

This indicated that Jason perceived the teacher's action as the demonstration of belief in his ability, especially when the teacher did not ask anyone else but him. As for Ji, he said that during his internship at an international hotel,

*"...if the manager told me to do this, then I think he believe I can do it, so I will not be afraid of this kind of thing".*

Two participants namely Summer and Jasmine reported how their manager and coach played key roles in enhancing their EBs. In Summer's case, her regard for the expertise of her internship manager and her manager's insightful encouragement

helped convinced Summer that she has made the right career choice in hotel management.

Summer: *‘...I always thought whether the choice is right or wrong. When I had my first internship... the manager said that I am suitable to stay in hotels. So, I think I can exercise myself and maybe stay in the hotel in the future...’*

Jasmine’s comment below emphasised how important she felt about the way her relationship with her coach has helped not only developed her skills but also enhanced her EB. She indicated that not only did her coach teach, they also demonstrate physical techniques, adopt one to one instructions when students needed extra coaching, and show them how much they believe in their students or trainees abilities to succeed.

Jasmine: *“In China? .... The coach, they build a team like every lesson, 20 people. When you have a problem, they work one to one. For example, our class is 2 hours. They focus on people one by one. They interact with students, not just verbally but also physically to teach you something. They really really believe in you. I think it is their job goal to believe in you.”*

Jasmine was selected at a very young age to join the Chinese National Sports Academy to train with the goal of representing China on their future national Olympic team. As the academy was both her school and home since she finished primary school, her coaches played the role of teachers and parents at the same time. Her narrative her shows the importance of her coach/teacher believing in their students at the academy for them to succeed in a highly competitive environment.

These accounts suggest that having someone who believes in you is a significant EB enhancer, particularly if it is someone who is considered credible. This sense of EB that is based on beliefs that others have in you is referred to by Zeldin & Pajares (2000, p. 239) as '*relational efficacy*'. Lent and Lopez (2002) theorized that self-efficacy, other-efficacy, and relational efficacy are related to the key relationship quality such as various affective, cognitive, and behavioural outcomes amongst the recipients. They also contended that, within close relationships,

*"....., self-efficacy (beliefs about one's own capabilities) exist in dynamic interaction with the beliefs that people hold about the efficacy of their relationship partners (other-efficacy) and about how their partners view them (relational efficacy). This tripartite system of efficacy beliefs may have important implications for relationship formation, satisfaction, and persistence, as well as for the processes of acquiring and restoring self-efficacy, especially under distressing life conditions." (p.256).*

Furthermore, research, conducted by Crundall and Foddy (1981), and Webster and Sobieszek (1974) demonstrated that people are more inclined to trust the encouragement coming from persuaders who possess credible expertise of knowledge and experience to make an objective prediction of performance capabilities, especially when they are not confident to make accurate self-evaluations. However, if there is no one in their personal environment who they feel they could rely on or trust to support them in times of need, they would turn to themselves for self-encouragement (see 4.1.1.3.2 - Encouragement by Self).

#### **4.1.1.3.4.    *Encouragement by Friends***

The findings showed that only one participant rated encouragement by friends as the most effective, with four participants who ranked friends in second place for effectiveness in enhancing EB. The effectiveness of encouragement by friends is reported below whereby similarity between the persuaders and the recipient, especially if the persuader is perceived to have the same thinking, is significant.

Lily: *“...because my friends, the age is similar. So, they have the same ideas as me. My father is older, so maybe there are some words I cannot accept from him.”*

The findings showed that the key reason why some participants did not rank friends as the most influential in their PSE was due to the friends' immaturity in making sound decisions, especially when they felt that their friends were comparatively less confident than themselves, reinforcing the importance of the persuaders' credibility factor in social encouragement.

Mei was the only participant who reported that friends are the most influential in terms of social encouragement. Her reasons were:

*“...maybe sometimes they cannot help me a lot, but they can help me calmed down. That is, I think my best friend's magic. I need to calm down, then I can find the way to deal with things...”*

This account from Mei suggested that, even if social encouragement by friends may not be deemed credible from the academic performance perspective, this form of encouragement may be more effective regarding social issues, whereby the ability to empathise may be more valued by the recipient. Nevertheless, it also indicates that social encouragement from friends can help the recipients overcome

physiological and emotional distress and consequently enabling them to focus on their academic performance. Study conducted by Stephens, Franks, Rook, Iida, Hemphill & Salem (2013) on the influence of family and friends on chronic illness self-management efficacy found that although the overall results of their study indicated more positive influences than negative, they also noted that for the most part friends influences were more positive than family. This perhaps reflect that support from friends in emotional situations are more discretionary in nature and voluntary whereas interactions with family members may not always be voluntary.

The findings for social encouragement or verbal persuasion is consistent with Bandura's (1997) observations that parents, teachers, and peers play vital roles in the development of EB because they serve to validate the individual's own PSE and as enabling influences in helping one develop resilience to adversity.

#### **4.2.1.4 Physiological & Emotional Status**

The physiological and emotional conditions reported by the participants were primarily ones that affect them negatively, such as feeling stressed, anxiety or nervous prior to or during an event such as writing a major assignment and, particularly, making presentations in class. Nine participants mentioned that they exercise some form of self-regulation through '*self-talk*' to mediate stressful conditions. For example:

Sunny:       " ... yes, yes, *I always talk to myself especially when I am nervous, like... 'you can, you can!'...it is just a habit from the books I read...*"

indicating that she managed to overcome her nervousness through self-encouragement.

Liling said: *“...I tell myself to fight... I tell myself ‘it’s okay, it’s fine, don’t worry about this, you can do this’...”*

Victor: *“...when I am afraid to, or must do something I hate to do, before that, I ask myself if there is anything worse than death. If I am dead, I am nothing and if I did this, I won’t be dead. Therefore, if I am doing what I fear, it is nothing.....sometimes, I will sweat. My hands will be full of sweat and I can think of nothing, but if you want to speak, obviously you have prepared something. So, stand up and speak. Just do it.”*

Jason related that, when he suffers from anxieties during class presentations, he tells himself that the audience are not really people as a strategy to overcome the stress.

Jason: *“... ‘they are just carrots, they are rabbits.’ In my heart, there is a small person who says, ‘it’s okay, be confident, they are carrots and rabbits, not people’.”*

Moon, who reported that she is always nervous and worries about her studies, related,

Moon: *“...I just tell myself ‘just do it’. I also capture some inspirational quotes on my phone to inspire my confidence...I love getting quotes for encouragement like ‘if there is a will, there is a way’ kind of quotations.”*

The findings for this source of self-efficacy showed that, apart from using self-talk, which appears to be the most popular strategy for the participants to maintain EB under stressful situations, some participants also use other strategies to regulate their emotions. For example, Jasmine meditates and does yoga

exercises and Ji listens to music to keep calm. Spring uses a combination of crying to help her relieve her anxieties and self-talk.

Spring: *"I would cry.... after crying, I will calm down. I will tell myself, 'it's okay, after this challenge, I will be better'."*

These experiences indicated that overcoming physiological and emotional statuses that are threatening to their performance are survival instincts, as no one reported giving in to the negative effects of physiological and emotional status. There were no reported experiences that physiological and emotional status enhanced their sense of self-efficacy; rather, their actions could be interpreted as their abilities to abate the negative effects of physiological and emotional status which could diminish their chances of success, if left unchecked. Therefore, abating these negative effects helped them reduce their self-doubt and maintain their sense of coping efficacy to complete the task at hand.

Physiological and emotional conditions are affective factors, such as nervousness, fear, stress, fatigue and mood, that are used by people to gauge their performance vulnerability and sense of competence in various situations such as: nervousness or anxieties in making presentations, or public speaking to a large group of people, emotional upsets, disappointment with results of personal performance, fear of attempting something new and receiving criticisms or negative feedback for poor performance.

The findings from this study showed that the participants were able to manage these somatic states, indicating that they were familiar with such experiences and had developed coping strategies to handle these situations. In this



study, 'self-talk' was the most frequently used form of self-encouragement to see through the task or activity. Self-talk is described by Gibson, Baden, Lambert, M., Lambert, E., Harley, Hampson and Noakes (2003) as a 'cognitive discussion', which aims to assess the relative benefits of completing the activity against the potentially damaging effects of the effort needed to complete the activity. Other terms used to describe '*self-talk*' are private speech, inner dialogue, soliloquy, egocentric speech, self-communicative speech, sub-vocal speech and self-verbalisation speech (Athens, 1994; Morin, 2005; Binkofski, Amunts, Stephan, Posse, Schormann, Freund & Seitz, 2000; Grumet, 1985). Self-talk can also be described as a form of cognitive strategy employed by individuals to change or influence existing thought patterns (Gould, Eklund & Jackson, 1992, 1993). Athens (1994) and Morin (2005) suggested that self-talk may be a vital part of conscious perception and self-awareness. Research conducted by Binkofski et al. (2000) found that the vocalisation parts of the brain connected to 'self-talk' are associated with the motor processes and sensorimotor integration of the brain. This finding suggested that both the awareness and the behaviour that arise in response to emotional or physical stimuli are linked to relevant physiological fluctuations.

Self-talk has been generally conceptualised by researchers as either positive, negative, instructional or motivational in nature. Positive self-talk such as "good job; well done; do it again," (Hardy, Gammage & Hall, 2001; Hardy, J., Hall and Hardy, L., 2005) can be described as forms of self-praise or personal encouragement to keep one focused in the present (Moran, 2016; Weinberg, 1988), whilst negative self-talk such as "stupid mistake; get your \_\_\_\_\_ into gear," (Hardy et al., 2001) can be described as forms of self-criticism (Moran, 1996). Motivational self-talk are used to enhance motivation and confidence such as "come on; let's go;

you can do this” (Van Raalte, Brewer, Rivera & Petitpas, 1994), whilst instructional self-talk are cues used for physical performance such as “step, drop, step kick’ for a soccer punt (Zinsser, Bunker & Williams, 1998). The self-talk reported by the participants in this study appear to be positive and motivational and used to help overcome their anxieties. In their critical literature review of research on self-talk, Tod, Hardy and Oliver (2011) found that self-talk of the positive, instructional and motivational categories were beneficial to performance, whilst negative self-talk have neutral effects on skills performance. Although self-talk has not been referred to as a source of self-efficacy in any literature reviewed, the use of self-talk as a form of self-affirmation or self-encouragement may well be a manifestation of social encouragement of one’s potential over time.

Bandura (1997) argued that persuasory modes of self-efficacy enhancement should not be misunderstood simply as brief verbal attempts or social pep talks, but rather beliefs in one’s potential instilled by significant others over a long period of time that then shape one’s basic orientation to life. He highlighted that people who overcame severe adversities provide the most striking testimony of enduring persuasory influences such as the story from the San Francisco Examiner (Mandel, 1993) story of a single mother who raised nine daughters on a cook’s wage of two dollars per hour. During her trying times, she would sing to her daughters and as a form of self-encouragement “*we may not have a cent to pay the rent, but we are gonna make it*” (Mandel, 1993, pp B1-B2). She later triumphed over the trying times to own five successful barbecue restaurants and she attributed her resilience to her mother who instilled in her a strong sense of personal agency “*work hard and you can get anything, do not wait for someone to give it to you*” (Mandel, 1993, pp.B1-B2).

In this study, there were no indication that the use of self-talk as a form of encouragement was learnt from others, but this does not necessary mean that they have not. The stronger indications from the narratives are that the participants use self-talk to mediate their anxieties and in doing so influence their thoughts to a positive orientation. According to Hardy (2006) there is very limited research on self-talk in relation to self-efficacy, however one could also argue that the beneficial effects of positive motivational self-talk might be explained in terms of reduced anxieties and increased efficacy (Van Raalte et al., 1995). Furthermore, studies by Weinberg, Grove & Jackson (1992) reported that positive self-talk is commonly adopted by tennis coaches as an efficacy building strategy. Nonetheless, the relationship between self-talk and self-efficacy warrants further investigation as apart from the lack of explicit examination of self-efficacy theory in relation to self-talk, much of self-talk research has been concentrated in sports domain.

Physiological and emotional states reported in this study indicated that they serve more as an impediment, rather than an enhancement, to PSE; and the participants had to adopt specific coping strategies such as self-talk to overcome or reduce these psychosomatic conditions to mobilise into action. Even those who indicated confidence in themselves reported experiencing situations whereby their physiological and emotional status undermined their PSE and posed a threat to their performance. Sometimes, overcoming fearful conditions that negatively influence one's PSE may be combatted with by a combination or sequence of multiple information sources to enhance EB. For example,

Spring:                    *"...the first time I did a presentation, I feel really nervous...also I have prepared a lot, a lot, a lot...but when I start to speak, everyone is looking at me...It is really really stress...I tell myself, 'trust*

*myself' and take a deep breath and because I am the first to speak, then I look at my teacher...she is XTVI teacher, and she is familiar with me. So, when I say something, and she nods and agrees with me, then suddenly I feel confident and say everything smoothly. Then one point by one point, my part is finished. Then I saw other students nod and agree with my mind - then I think, 'I did it!'"*

This account suggests that by preparing well for her presentation she was confident with her presentation materials, but this did not prevent her from being nervous and stressed about speaking in front of a large audience, albeit her fellow classmates. She adopted 'self-talk' to calm her nerves by telling herself to trust in herself. Then, when she started her presentation, she received positive non-verbal encouragement from her teacher in the form of a 'nod'. This gesture was enough encouragement to abate her nervousness and reaffirm her efficacy level to help her complete her presentation smoothly. This example highlighted several sources of self-efficacy at play that contributed to Spring's successful outcome. These are a) preparing well (self-regulation through effort investment); b) self-encouragement; c) encouragement from the teacher (social encouragement) d); encouragement from peers. Those of us who have experienced public speaking before can undoubtedly vouch that, regardless of how frequently one has made presentations to a large audience, the anxiety is always there, as the audience is seldom the same and they are unpredictable. Having at least one friendly face in the audience to support the presentation was demonstrated to be extremely helpful in Spring's case. It was also observed here that the timing of the non-verbal encouragement by her teacher at the start of her presentation was crucial in abating Spring's anxiety level and helped mobilise her to complete her presentation. This account highlighted that sources of

self-efficacy are sometimes combined to provide a holistic EB enhancement effect. It also highlighted that the timing when providing social encouragement, whether verbal or non-verbal, to maximise the effect of raising EB is an important consideration. According to Usher and Pajares (2006b), sources of self-efficacy are often intertwined:

*“A student who writes a masterful essay will probably earn top marks, receive praise from others, and experience positive feelings toward writing. In many cases, such students have been exposed to models proficient at writing. The student will surely approach writing tasks with a strong sense of efficacy gained from the combined effects of these sources.” (p. 127)*

#### **4.2.2 Summary**

Overall, the findings regarding social encouragement as a source of self-efficacy suggested that, generally, parents have the highest potential to play a crucial role in their children’s self-efficacy development. Parents are regarded as the first teachers in the Chinese participants’ life and not only assumed to know their children best, but also to have their children’s best interest at heart.

Teachers, coaches, industry supervisors and managers were also considered by many as credible social persuaders, even if they were not found to have the most influence in this study. What was consistent in the findings was that, regardless of who the persuaders of social encouragement were, the effectiveness of persuaders depends on how credible the recipients perceived the persuaders and their messages to be.

Many of the participants in this study reported that, culturally, it is not standard practice for Chinese teachers, and even parents, to provide verbal encouragement. In contrast, the participants said that the western teachers and managers are more generous with communicating verbal encouragement, suggesting that, contrary to their cultural norms, the participants found verbal encouragement positive in enhancing their sense of competence. Although some of the participants expressed preference for verbal encouragement over non-verbal encouragement, there were no suggestions in the findings that the traditional practice of non-verbal or restrained verbal encouragement by their Chinese teachers or parents were deemed to be of a lesser value.

Social encouragement as a source of self-efficacy is an enabling process that impacts on mobilisation and persistence. As Bandura (1977) explained:

*“The strength of peoples' conviction in their own effectiveness is likely to affect whether they would even try to cope with given situations. ... They get involved in activities and behave assuredly when they judge themselves capable of handling situations that would otherwise be intimidating. ... Efficacy expectations determine how much effort people will expend and how long they will persist in the face of obstacles and aversive experiences.”*  
(pp. 193-194)

Moreover, the performance outcome of any given task will depend on two kinds of expectations, namely: i) self-efficacy expectancy, that is whether one's effort will produce the desired level of performance, and ii) outcome expectancy, that is whether one's performance will produce the desired outcomes (Bandura, 1986a). According to Bandura (1986a), when social encouragement is effective, one's PSE

expectations are strengthened, and one develops a 'can do' attitude regardless of any anticipation for satisfactory performance outcomes. In other words, one's performance outcome expectancy is not necessarily affected.

### **4.3 Research Question C – What cultural value/s do the Chinese students hold about learning and academic achievement and how might they be perceived to impact on the students' PSE development?**

A key finding that relates to this research question would be the themes that emerged and were grouped under the overarching theme of Concept of Achievements, such as the participants' purpose of learning, cultural expectations and achievement, effort investment, concept of ability and measurement of academic success. These themes captured from the participants' narratives provide information that could help the understanding of cultural factors influencing how the participants evaluate achievements, their achievement outcome expectancies and their EB development. The findings are presented as follows:

#### **4.3.1 Purpose of Learning**

Table 4.7 shows how the participants perceived the purpose of learning. The findings indicated a general trend of self-improvement; in being adaptable to change and striving at one's personal best. This trend is consistent with Leung's (1993) proposition that Chinese children are taught from a young age to strive for self-improvement through educational achievements.



**Table 4-7 Summary of Participants' Purpose of Learning**

<b>Participants</b>	<b>Purpose of Learning</b>
Angel	<i>To learn about this world, not just subjects at school but also from society, and it is a life-long process. To also be a good person so that she does not let her parents lose face.</i>
Cherry	<i>To learn subjects from school, knowledge and skills for work and interpersonal communication to interact successfully with people.</i>
Jasmine	<i>Learning is more than just for survival but to understand herself and why we exist in this world.</i>
Ji	<i>To gain new knowledge and skills and to be cautious not to learn bad things that can hurt yourself and family. To keep on improving yourself and there is no end to how good you can be.</i>
Lily	<i>To gain knowledge and skills that will help you with your future career. Learning also means achievements and includes general achievements in life. To always do her personal best.</i>
Liling	<i>Learning is to become a real adult as learning can change my thinking, make me grow up, not just to graduate. To always do her personal best.</i>
Summer	<i>Learning is to become a useful and better person, to be able to earn a good income, support your family as the ability to build a family is one of the steps towards a whole or complete life.</i>
Mei	<i>Learning helps you survive in society as your skills and knowledge is like a protection to help you adjust yourself and adapt to succeed.</i>
Spring	<i>Learning is to better herself and become an adult. Being an adult means having your own opinions and look at things from different perspectives, solve problems and make good choices in her life.</i>
May	<i>Learning is change as the world is constantly changing and one needs to keep learning to keep up with changes around us.</i>
Moon	<i>Learning is increasing your knowledge and experience so that she can share it with other people. She believes that no matter what she achieved, she can always improve on it.</i>
Rose	<i>Learning is to gain enough knowledge to graduate from college and be able to solve problems and have the skills and knowledge for her work.</i>
Sunny	<i>Learning is a process to find her advantage in life. To improve herself by overcoming challenges and being able to change herself.</i>
Jason	<i>Learning is to do your personal best and working towards what he could to achieve at his best at a stage in life. To learn from mistakes and not repeat them again.</i>
Victor	<i>Learning is about self-improvement but not just centred on studying as it is depressing for him. Learning means being able to exercise his creativity and keep a peaceful mind.</i>

#### 4.3.2 Cultural Expectations and Achievement

The findings here indicated that a majority of the participants agreed that there is some tacit obligation or duty to be successful, to contribute to their families and society.

Cherry: *“...maybe most of the people would think like this, but I think it is not very important. Maybe sometimes you make the contribution that is not significant to society but just to your family.”*

*Cherry’s comment indicate that although she could recognise the cultural expectation of contribution to family through their personal success such as educational achievements, employment etc, but did not connect the further benefits to the community or society.*

Jasmine: *“Yes, it is an obligation, duty to achieve. You must achieve, get full score for your exams...Do you know Confucius? I read a lot of his teachings”.*

Jasmine’s comments indicated that she is familiar with the teachings of Confucius and understand the influence of these teachings in traditional Chinese culture whereby filial piety is an implicit component (Kwan, 2000).

Jason: *“my parents.... they hope that I could be the best in class, but it is very hard. I will do my best, maybe not the best in class.”*

Jason’s comment suggest that his parents has expectations that he excel in his academic achievements. However, he has reservations that he may not meet their expectations. Nonetheless, he has an obligation to try his hardest. According to Stevenson & Lee, 1996, poor academic performance represents both failure as an

individual and in filial duty that leads to the loss of face for the whole family in Chinese society. This situation is similar to Ji's case where he perceives he has the obligation to set the right example through his performance especially if he wants to attain the role of a leader in the future.

Ji: *"yes of course...because everyone can see your performance. If I am a leader or something, I can set the example for others".*

The above examples captured from the participants' narratives suggested that the implicit moral teachings of Confucius is evident, where

*".....there is the expectation for the younger generation to reciprocate what the parent generation has done for them. In other words, filial piety prescribes a communal and interdependent relationship in which the parent and children generations provide for the physical and emotional needs to one another at various points in time." (Kwan, 2000, p. 25).*

Mei was the only participant who reported that she does not accept this cultural expectation, but she understood and practised this filial piety.

Mei: *"I can't say I accept it, but I understand this because from my Middle School till now, I can feel that they educated me by their heart. They respect every decision from me. They take care of me, and now I cook food for my family, buy food to prepare lunch, do my homework, read my English, clean the house...every day I feel very tired, so I understand my parents. They took care of me for 20 years like this, so I think I need to pay it back."*

The findings indicated that a few participants felt some collectivistic obligation to their family to perform well at school. There were no indications that the

participants' behaviour towards achievement was typically collectivistic in nature, even though China is considered as a collectivist society. The findings indicated a general trend of concern for achievement to secure good future career prospects and financial security and, to a certain extent, independence from parents and family. This may be the result of the participants growing up in a dominant single-child environment.

In this study, the findings also indicated that there are cultural differences in the way the Chinese teachers and the western teachers (from the Australia) provide encouragement that may influence EB development. For example,

Spring: *"...But the Chinese teachers do not say much or encourage, just say 'okay'. ... think that good students do not need encouragement because in their minds, good students will always stay good. So, if I fall to the last student, they will ask 'why are you last?', 'did you play too much on the phone and did not study hard? etc.' ...and that it is my fault that I am last..."*

However, she added,

*"Western teachers give you more confidence and you trust yourself to do it...When I join the Australian programme, everything is different. The teaching, the ways, they use different ways. I am excited and want to have lessons. I am positive about learning."*

Mei: *"I went to America for half a month for travel and study. Their teaching is passionate, interesting and active. They were very polite and spoke very nice words to encourage and motivate me. But in our Chinese society, we seldom hear such encouragement. Maybe we do not talk very much, but we do things. Such as my parents, we can't say they encourage*

*me, but they will do things for me. For example, in winter, my father will get me duvet to warm my bed, they don't express so much in words. So, I like the SAJVP western style. The teachers always say nice words to encourage us."*

These examples highlighted cultural differences in the way encouragement is demonstrated and suggest that, even though the participants are accustomed to the subtler Chinese style of non-verbal encouragement, some of these participants who have no credibility issues with teachers expressed a preference for more demonstrative verbal encouragement to affirm their capabilities.

According to Lee, Cameron, Xu, and Board (1997), in Chinese society, modesty is valued and promoted both at home and at school. Children are raised to avoid self-aggrandisement: that is, not to boast about personal success and not to seek explicit praise from others (Lee et al., 1997). In addition,

*"Chinese children are taught from an early age on that good behaviour, study hard, and a high level of educational achievement are important forms of self-improvement. They are taught that one's ultimate level of achievement is attained through one's efforts..."* (Leung, 1993, p. 8.)

In Chinese practice, telling your students or your children that they have done well is a form of praise that places emphasis on inherent abilities, a practice that is not encouraged. However, recognising their hard work to achieve success is more of the accepted norm. Nonetheless, it would not be difficult to imagine how a Chinese student who has never experienced verbal encouragement from a teacher

or parent who they hold in high regard would feel when he/she suddenly received praise for a job well done. It would have to be a tremendous boost to their EB level.

Kanouse, Gumpert and Canavan-Gumpert (1981) defined praise as the explicit positive verbal appraisals of another person's products, actions, or traits, based on the appraiser's subjective values. Although feedback can be positive, or negative, social or verbal encouragement is understood as positive in nature such as 'you can do this' or 'that was great effort' or 'this piece of work from you show great potential' or using nonverbal signalling by way of a 'thumbs up or a nod'. Dweck (2007) cautioned that:

*"The wrong kind of praise creates self-defeating behaviour. The right kind motivates students to learn."* (p.1).

Dweck's (1999, 2006) studies found that, when learners are provided with encouragement, feedback or praise that focused on their inherent ability, they are likely to develop excessive focus on how intelligent they are and pursue activities that will attest their intelligence and avoid those that might not. On the other hand, praise for effort helped them to develop the belief that they could learn and improve with hard work. Furthermore, Brummelman, Crocker and Bushman (2016) also argue that personal praise that highlights inherent ability may backfire - especially with students who have low-self-esteem. This is because, when they fail, they would feel ashamed, they do not know how to persist, and are likely to give up easily. Studies conducted by Schunk (1982; 1984b), and Schunk and Cox (1986) also found that evaluative feedback emphasising inherent abilities was less effective in enhancing PSE than feedback conveying to students that they have improved their performance through their effort or hard work.

This study also found that negative encouragement in the form of negative feedback or criticism can also have a positive effect, as inferred in Lily's case. Lily reported that, during her internship, her manager would criticise her work to encourage her to reach for perfection.

Lily: *"..... like my manager in internship. He will not always encourage me. He will always say "here, here, here not good, not perfect, you should do better".... maybe I might think it is perfect, but he always says "no, no, no, it is not enough". But this is also a motivation for me."*

In this instance, Lily's manager could also be a proficient model who not only set the standards for her to appraise her capabilities, but also who possessed the competencies that she aspired to achieve. According to Bandura (1997), competent models play an instructive modelling role for the observers to help the learner acquire useful skills, and the contribution of instructive modelling is particularly essential when perceived competence reflects skills shortfalls rather than the misappraisals of possessed skills.

#### **4.3.3 Perception of Academic Success**

Table 4.8 shows how the participants measured their academic success. The findings reflected a general trend of a) achieving good grades (which is higher than pass grades); b) possessing the ability to apply their knowledge and skills in practice. The general indications from the participants' remarks presented in this table reflect a certain amount of ambition and the need to perform beyond average academic achievements. This suggests that, even within the Chinese VE learning environment, the participants express the necessity to be highly competitive. The

findings indicate that a challenging and more engaging learning environment had more positive effects on their mastery experience, confidence level, raised interest and motivation to learn. For example,

Angel: *“...in the Chinese part of JVP, sometimes, most of the classmates do try their best. In some subjects, the teacher talks about the topic, they don’t listen to the teacher...just do whatever they like... this is very strange. Everyone doesn’t listen to the teacher. But in the Australian part of JVP, when the teacher talks about the topics in class, I think I am more interested because they will use different ways to talk about this topic and to attract our interest.”*

Cherry: *“Before, we just do easy homework, but in the Australian SAJVP, we needed to write reports and have to use references to support our opinion. It also improved our writing skills. ...I think the Australian SAJVP is stressful, but it is also useful...my English improved from when I was with the Chinese part of the SAJVP. Before I entered the Australian part of the programme, I was very shy. I don’t like to speak in front of so many people. But with the SAJVP, you must prepare a lot before we do the presentations. So, not only the confidence but our oral skills also improved.”*

Rose: *“...the two components of the SAJVP are totally different ...In the Chinese programme, I think it is simpler and the Australian programme more difficult, and we need to adapt to Australian system. We also have all the lessons in English, so we need to improve our English.”* Rose estimated that it took her two months to adapt.



**Table 4-8 - Measurement of Academic Success**

<b>Participants</b>	<b>Measurement of Academic Success</b>
Angel	<i>Academic success is more than passing or achieving high grades. It is very important for her to be able to apply what she has learnt in her future career.</i>
Cherry	<i>Passing every subject then slowly improving to becoming one of the top students in class.</i>
Jasmine	<i>Passing all subjects as a minimum criterion, but she needs to feel that she has learnt more than just being able to pass exams as this is boring and unsatisfying for her.</i>
Ji	<i>Achieving good grades. Good grades for him are Credits and Distinctions. If he achieves High Distinction grades, it is considered a bonus.</i>
Lily	<i>Sets different goals for different subjects. Achieving the impossible is the highest measure of academic success for him.</i>
Liling	<i>Achieving Distinction grades for all subjects, but she does not believe that even if she worked very hard, she would achieve that.</i>
Summer	<i>Would like to be amongst the top ten percent in class, but she does not believe she can achieve this, at least not in theory classes, but it is possible in practical classes.</i>
Mei	<i>Achieving high grades and being amongst the top ten percent in class.</i>
Spring	<i>Achieving good grades and owning the knowledge and skills and being able to apply them in practice.</i>
May	<i>Achieving good grades such as Credits and Distinctions. Pass grades are not good enough.</i>
Moon	<i>Passing all subjects and graduate and be able to apply skills and knowledge learnt in her future work.</i>
Rose	<i>Sets different goals for different subjects because she does not like all the subjects. She will work harder on subjects that she likes. Pass grades are not good enough. Credit grades are good enough.</i>
Sunny	<i>Passing every subject and ideally to achieve Credit and Distinction grades.</i>
Jason	<i>Achieving good grades and learning new things every day.</i>
Victor	<i>Achieving good grades especially if he has worked very hard for it.</i>

Sunny: *"...in the Chinese part of SAJVP, we have little stress, but in the Australian part, our time is full. We have much more pressure than before...I think it is good because our life is more colourful. Also, the lessons are difficult, but it is another challenge for me...I have to develop an optimistic mind."*

Liling: *"...in the Chinese programme, we study in Chinese and the teachers do not always tell us to study, so actually we do not work hard. But in the Australian programme, we need to study in English and suddenly, everyone is working very hard. I don't know why, I also work hard too. Just myself want to work hard...I want to finish this programme, I want to graduate...maybe I am older...maybe I just think want to graduate and I need to work..."*

These accounts suggest that, when the learning environment is challenging, the students increased their effort and persistence. One could also interpret this environment as being created by multiple vicarious modelling experiences, which then developed into a cultural norm for the SAJVP, albeit a competitive one as everyone is working hard and no one wanted to be left behind. These accounts also suggest that the participants experienced collective efficacy when they entered the Australian component of the SAJVP. Collective efficacy is one of the forms of efficacy in SET. According to Bandura (1997),

*"....collective efficacy is concerned with the performance capability of a social system as a whole" (p. 469).*

This means that for education institutions, collective efficacy relates to the perceptions of teachers in an institution that the faculty as a whole can implement the necessary courses of action to effect positive influence on the students.

For these participants, their learning environment also included the various hotels where they completed their internship with during their fourth-year studies. This study found that, for most of the participants, their internship experiences have reinforced or strengthened their PSE and their career-decidedness, suggesting that the participants were also able to benefit from the collective efficacy of their internship workplace.

Gordon (1998) described career decidedness as the degree of certainty or confidence about a career-related decision. Research into career indecision indicated that an individual's level of PSE is one of the strongest predictors of his/her career indecision (Betz & Vuyten, 1997). According to Lent et al. (1994), individuals with high PSE have the tendency to envisage positive outcomes of activities they engage in, which helps them concentrate on achieving their goals and translates into decidedness about their career choices. Studies conducted by Restubog, Florentino & Garcia (2010) found that high career self-efficacy is related to high career decidedness. They define career self-efficacy as

*“students’ beliefs about their ability to succeed in an academic program that is aimed toward a particular career”* (p.188).

The findings here indicate that high career decidedness is also related to high persistence and a reduced likelihood of dropping out from their career-related programme of study. The findings indicated that, for most of the participants, their

internship experiences helped them grow up, reinforced their PSE and, for a few, highlighted that they do not necessary want to pursue this pathway for their careers. The participants also reported an increase in confidence, especially in communication, and a sense of maturity from the industry experience. For example,

Jason: *"...for me, when I grew up after I did my internship, I feel better. It is easier to mature, and, in the future, I can look after myself..."*

Jason's comment inferred that the experience during his internship helped him to mature from a student to that of a member of the workforce which in turn enhanced his sense of independence such as being able to take care of himself.

Ji: *"...my communication skills improved, both in English and Chinese. At school I was not very good in communication, but in industry, you have to communicate everyday with guests and colleagues..."*

Ji's comment above reflected the value of real life practice whereby his communication skills improvement as a result of daily practice using both the English and Chinese language in the hotel where he worked to communicate with colleagues and hotel guests.

Lily: *"...I feel more confident because in my restaurant, the other staff could not believe that I could do so many things so quickly and was quick to learn things. Because it is so busy, you simply must face the problems, you cannot always ask your manager or supervisor to help. You have to do by yourself to solve the problems...in the beginning we have no working knowledge, but after the internship, you know how important all the knowledge is for you especially in the international*

*hotels...at our restaurant, they don't teach us about wine knowledge, so I have to use my knowledge from school for this..."*

Lily's comment indicates that her internship experience put her in the real life situation whereby she had to and was able to apply the knowledge of what she have learnt from school. The internship experience also highlighted her abilities and ability to learn quickly which she had no awareness of previously. This experience also allowed her to appreciate the relevance of her studies on the SAJVP.

Sunny: *"...during the internship when I went to the hotel, I was very nervous to communicate with foreigners. But after a few days, the Guest Services Manager is a manager from Spain, and he taught me a lot. He taught me how to communicate with foreigners...that you can talk about the weather or about China...he encouraged me and told me that I just have to believe in myself."*

Sunny's comment suggests that she benefited from encouragement by her Spanish supervisor who also reinforce the importance of self-belief. The supervisor also supported the encouragement with relevance tips to help her improve her communication skills.

Although the internship is not regarded as an academic assignment, for the VE students it is the place where they get to 'test drive' their skills and knowledge learnt from school. Their internship provided them with the most authentic form of mastery experience and reinforced the relevance of their studies at school on the proviso that the curriculum is aligned to industry needs and more. This means skills and knowledge that will allow them to develop and advance their careers.

The findings also indicated that six of the participants harboured doubts that they will continue in the hotel management career path after their internship experience. They related their doubts as follows:

*Angel: "When I will graduate from my school, I think I will try some new job to find myself. Maybe I can find a job that I have the interest, and maybe I will be more confident."*

Despite Angel's success during her internship, her comment here suggested that she sees a connection between interest and self-confidence development.

*Victor: ".....to become a professional manager in the industry. But first I need to graduate from this programme. I might think of going to college first before going to work in the industry, or I might try other industries."*

Victor's comment above suggests that he would like to try to gain entry into the academic stream such as into a university after he has completed his current studies. Although he may not be able to gain entry into the Chinese university system, he certainly has the opportunity to gain entry into some other foreign joint venture universities in China or other universities abroad.

*May: "...when I was in internship and the work was very tiring, I did wonder if I chose the correct major. But I think I should not give up because I have not been working so long. I think I should give myself another chance, and maybe I will like it later."*

Although May's comment suggests that she did not like the long working hours in the hotel, giving up would perhaps be interpreted by friends and family that she is not resilient to real life work.

*Cherry: "Now I think about this because the hotel is very hard work, long hours. Even if I choose hotel, I would choose the administrative department."*

Similar with May's comment, Cherry's comment suggests that she have investigated the options within the hotel environment whereby she could still pursue a career if she did not care for the long hours required in the operation departments.

Liling: *I don't want to become a hotel manager, but I still want to be in the hotel environment: maybe in the human resources department."*

Liling's comment indicates that like Cherry, she did not want to be in hotel operations, but she could still use the knowledge and skills from her study programme to work in the human resources department.

Lily: *"For me, I am studying hospitality now, so I want to be a hotel manager in the future. But for long term, I am not so sure whether I will always stay in hotels...I don't want to be a specific person but have high quality and have enough knowledge in my mind, and I want to be a business woman and not rely on others."*

Lily's comment suggests that she has ambition to become a manager and that once she has gained sufficient experience, she would like to start her own business. Although there were no indications that the above-mentioned participants in this study would drop out from their SAJVP at the time of interview, it was evident that their internship experience provided them with an authentic experience that helped them appraise their career self-efficacy. One could assume that these participants have successfully completed their internship; otherwise, according to the progression criteria of the SAJVP, they would have had to repeat a further internship-term had they failed. Therefore, one could deduce that, despite their mastery experience in internship, they came away with less career-decidedness. There were also indications in their narratives that their doubts were not skills- or

knowledge-related, but rather the physical demands and the work hours they were dissatisfied with. In other words, it is possible to have self-efficacy in a job, yet not have the desire to pursue a career within that field.

#### **4.3.4 Effort and Achievement**

The findings from the interviews showed a high reference of effort investment in the context of achievement. In general, the participants reported the belief that, without effort, nothing could be achieved, and that unless one tries one's best by putting in the best possible effort, one would never know the extent of one's capability. For example, Angel does not see herself as a hardworking student and she expressed her conflicts with having to invest effort with no guarantee of successful outcomes.

*Angel: "...sometimes, even if it cost much pain, you don't have anything come back. But in Chinese culture, you must try your best to do something even if nothing comes back to you. If you don't try, how can you be sure that you can't do these things...for me, I prefer to achieve success without having to put in effort... In fact, I am a lazy person, I do not like to try my best all the time."*

The participants also generally believed that, if one has tried one's best and failed, one should apply even more effort to try harder as failure is part and parcel of the process of learning.

*Summer: "...if you give up, you will get nothing."*

*Ji: "...maybe because of my personal emotion, I just want to succeed. I will try different ways. I will try my best, I will never give up."*



This attitude of 'if at first you don't succeed, try and try again' indicated that it is a cultural expectation or practice to persevere and that failure or poor performance is the result of lack of effort and a personal responsibility. For example,

Summer: *"...If I don't do well, my parents will blame me...maybe that I did not study hard ...did I not listen carefully?"*

This finding is consistent with previous studies by Chen and Uttal (1988), Hess, Chang and McDevitt (1987) and Hau and Salili (1996) suggesting that high effort expenditure for achievement is a Chinese trait. Perhaps so, but in one segment of the interview with Summer, she was asked if all Chinese are hardworking and she said:

*"No. It depends on yourself. Not every Chinese is hard working. My mum is hardworking, but not my father."*

Effort expenditure is perhaps more accurately regarded as a coping strategy or self-regulation linked with persistence, rather than a source of source of self-efficacy. Bandura and Cervone (1986) suggested that,

*"People often doubt their efficacy to mount and sustain the high level of effort needed to succeed in difficult endeavours..... Many failures reflect an inability to regulate one's motivation rather than a deficiency of knowledge or basic skills." (p.84).*

Therefore, the ability to exercise effort investment is a form of controllability over one's growth and achievements and this ability reflects one's sense of self-regulatory efficacy (Bandura, 1991; 1993).

What appears to be inconsistent here with Bandura's (1977) SET indicated by the participants' narratives in this study is that the participants believed in effort investment regardless of their level of PSE. The strong effort orientation amongst the participants can also indicate that the Chinese participants are more process focused and hold the view that ability is malleable and incremental with effort (Dweck, 2012). The participants' persistence despite failure experiences also suggests that they accept failure as part and parcel of the learning process or that failure is the result of insufficient effort. This in turn suggests that they would persevere extensively and not give up easily in the face of adversity. In the following section, the relationship between effort investment and concept of ability will be discussed, based on data analysed and captured under the subtheme of Effort and Concept of Ability.

#### **4.3.5 Effort and Concept of Ability**

According to Wood and Bandura (1989), concept of ability refers to how individuals construe ability; whether ability is a relatively fixed entity or one that is malleable and can be increased with knowledge acquisition. This sub-theme captured the narratives that reflected how the participants perceived ability. In general, the findings showed that all the participants believed that ability is not fixed, even when they accepted that some individuals may possess a quicker mind. The important factor for the participants is that one must be prepared to invest the time and effort to acquire the skills and knowledge. Here are a few examples of what they said:

Cherry: *"...if you want to achieve something, of course you need to spend something like your time, because you want to get this. You must put more*

*effort and if you get it, you will think it is meaningful. I think effort is connected with achievement. So, you put more effort, the achievement you get will make you happy.”*

*Cherry’s comment suggests that she believes that effort investment is needed to achieve anything and that the reward gained through hard work makes the success sweeter.*

*May: “...even smart people also need to study...some people may be born talented, therefore their manner to every work is not serious. If they do not work hard, others who work hard can become better than them.”*

May’s comment suggests that she acknowledges there are people who have innate talent or intelligence, however these people can also fail in their endeavours if they do not apply effort. In such situations, people who are conscientious and worked hard could surpass them.

*Lily: “Maybe sometimes there might be one or two people who have the smart mind, but not normal people. Normal people cannot do that. You also need your effort. If no effort, maybe you are just lucky.”*

Lily’s comment suggests that she believes innate talent or intelligence is a rare thing and that the average person needs to invest effort to achieve. Her comment here inferred that if success is attained without effort, it is the result of luck rather than through one’s abilities.

The participants’ accounts generally suggest that they hold a mind-set that ability is malleable rather than fixed (Dweck, 2008). Research conducted by Hong et al. (1999) found that implicit theories of ability create the understanding that ability and effort are allotted uneven weighting. For example, the students in their study put more importance on effort when they hold an incremental view of ability, while those

who hold the view that ability is fixed were inclined to place more emphasis on ability.

The findings from this present study showed that, even though some of the participants acknowledged that they are not good in some domains of study such as Maths, Accounting and Communication, they still believe that with more effort they have the chance to be competent in these subjects, reflecting that these participants generally view their ability as malleable. Since Dweck's initial series of research published on fixed and incremental views of ability and mindsets (Dweck, 2000, 2008, 2012), she has revisited the concepts of growth mindsets and highlighted some misconceptions that have arisen. For example, Dweck (2015) cautioned that although effort is necessary for student achievement, it is necessary also for students to develop a repertoire of learning strategies to succeed, as students can invest effort yet not make progress with their learning.

There are also a few participants in this study who viewed hard work or high effort investment as a reflection of their general lack of ability, including a few participants who perceived a lack of inherent ability in specific domains such as Maths. The following narratives captured the sense that even though these participants did not say that they are inherently inept at Maths, they tried to emphasise that their poor Maths results were not due to lack of effort.

*Liling: At that time, I had no idea where to study and my mother said, my Maths is too poor. So, she thinks if I went to high school, I would not have good future. She wanted me to learn English ... But I never achieve good results without working hard. I always have to work hard to succeed. But*

*about my Maths, I really worked very very hard, but I always can't pass. So, I gave it up at high school."*

Angel: *"I have learnt Accounting and I think it is so difficult...my middle school grades was not enough for accounting major."*

Lily: *"Before I studied Maths and it is so hard and tried my best to solve the Maths problems. But the exam marks for Maths is not so good, so slowly I dislike Maths. If I work really hard and I don't get any good results, I will be very disappointed and lose motivation."*

The above accounts are consistent with arguments by Bandura (1986a) that *"Percepts of ability are formed as individuals attempt and complete tasks. However, people are more influenced by how they interpret their experience than by their attainments per se. For this reason, self-efficacy beliefs usually predict future behaviour better than does past experience. Prior experience influences subsequent behaviour largely through its effect on self-efficacy beliefs, and these can influence performance "independent of past behaviour" (p. 424).*

Researchers who have explored the relationship between prior experience and math self-efficacy have reported both significant correlations and direct effects (e.g., Cooper & Robinson, 1991; Hackett, 1985). Furthermore, Bandura (1997) contended that:

*"Performance attainments are partly determined by how hard one works at a given pursuit. Therefore, the amount of effort expended affects inferences of capability from task performances." (p.83).*

Individuals' beliefs about their coping abilities also play an important role in the self-regulations of their fear or dislike for specific tasks or endeavours (Bandura, 2012),

*".....such beliefs affect the slate of options people consider and the choices they make at important decisional points." (p.13).*

The interview dialogue below captures the reasons for students to persist in such situations. This persistence rather than giving up suggests that these participants despite their lack of PSE for maths, hold high EB in their coping capabilities.

Interviewer: *"So, you hate Maths? Why do you hate Maths?"*

Summer: *"Just don't like it since my primary school."*

Interviewer: *"But you said you pass Accounting in the SAJVP? Why did you pass Accounting even when you hated numbers?"*

Summer: *"Because I need to graduate."*

In the following dialogue with Sunny and Victor, one could interpret from their narrative that vicarious experience provided them with the motivation or courage to push themselves to work harder or invest more effort to overcome a subject that they have low EB in.

Interviewer: *"So what made you push yourself to do it?"*

Sunny: *"...because we need to pass these lessons."*

Interviewer: *"Why is it important to pass?"*

Sunny: *"Maybe to enter to Level 2 and other students are very hard working so you have to also work very hard to catch up with them."*

In the following narrative from Victor, one could glean that he would avoid studying Accounting if he had the choice, otherwise he would attempt the subject if he had company to study it with.

*Victor: "If I am thinking like accounting being a compulsory subject to do, I would not be afraid because I have to do it whether I like it or not. However, if it is not compulsory and I have a choice not to do it, then I might not. But if I have company to do it together with, I will do it."*

These examples highlight the importance of vicarious experience as a source of self-efficacy in situations when students either lack the interest, PSE or are insecure of ability in certain domains. Studies conducted by Komarraju and Nadler (2013) on self-efficacy and achievement found that students who possess high levels of PSE and confidence in their academic performance are more likely to believe that intelligence or ability is incremental and is determined by effort. Their findings are important and encouraging because they dovetail with previous empirical results indicating that one's self-efficacy can be improved and developed (Bandura, 1989). Their study also found that the students who possessed low levels of PSE and who are unsure and insecure about their academic ability, are more likely to believe that intelligence is a fixed and therefore less likely to be motivated by either performance or mastery goals (Komarraju & Nadler, 2013). These findings highlight the complex relationship between one's self-efficacy, implicit beliefs about valuing effort, and mastery endeavour orientation.

#### 4.3.6 Self-Concept and PSE

SC and PSE are two similar constructs and, whilst SC is focused on what capabilities a person possesses, PSE is concerned with what that person believe he /she could do with the capabilities he/she possesses. According to Bong and Skaalvik (2003),

*“This provides a point of comparison with a self-concept judgment, which routinely calls for an evaluation of the skills and abilities. While self-concept represents one’s general perceptions of the self in given domains of functioning, self-efficacy represents individuals’ expectations and convictions of what they can accomplish in given situations.” (p.5)*

A few participants in this study talked about their self-concepts and subsequent impacts on PSE. For example, Angel, Sunny and Liling see themselves as shy and use this to explain why they lack communication skills, and their avoidance of interaction with others.

Angel: *“I was a shy girl. I don’t like to talk with other people...”*

Sunny: *“...because I am a shy girl, I am afraid to communicate with others...”*

Liling: *“I think I can be better but, sometimes, I just can’t get better. I don’t know why. Maybe it is my personality. Sometimes for example, I may be shy, so I want to have a change to learn to communicate with others...maybe my mind says this is too hard for you, but I want to do this and sometimes, I can do this...I am shy, but I want to change, ... I want to be more outgoing and outstanding.”*

The use of the word ‘shy’ appears to be an accepted excuse for lack of ability to communicate with others. The narrative inferred that shyness is something



inherent which takes the focus away from the lack of PSE in communication which, to these students studying on the SAJVP, relates also to English Language proficiency.

Lily and Rose considered themselves to be lazy and that their lack of diligence in their studies is caused by their laziness. For example,

*Lily explained: "...when I start to write my report or before I prepare for my exams, because sometimes, I am lazy, I don't want to write my report or prepare for my exams...I think that I am always confident, I always think that I am better, but just lazy... If my classmates do their reports, I would say 'oh my God, she has done her report?'...Then I will tell myself 'don't worry, I am a clever girl, I can do it, I will do it'...then I will start to do my report."*

Lily also does not perceive herself as being amongst 'the good students', inferring that she was not amongst the high achievers in her class. But when she did achieve very high grades, she realised that she has the academic ability to be amongst the top performers.

*Lily: "...in my last term, my communication subject marks are very high – Distinction, and Distinction grade for my cross-cultural communication subject. This let me believe I can also do well, not just the good students."*

Whereas Rose ascribed her laziness to her lack of interest her studies.

*Rose: "...sometimes I push myself, to find something that I am interested in...but I think I am a little lazy..."*

Apart from having self-concepts of shyness or laziness, the seven participants previously described as having poor Maths ability could also be regarded as having poor Maths self-concept. The accounts of their poor self-concept in specific domains also reflected their inferred low levels of PSE in those areas. For example, their shy self-concept based on the self-evaluation of lack of ability to communicate with strangers in turn affects their EB that they would probably not do well in a career in the hospitality industry, wherein being able to talk to strangers, or anyone they interact with, is a key skill set. Their historical poor performance in Maths affected their PSE and SC, and intense dislike for any subjects that are related to numbers and calculations, such as Accounting, Financial Accounting, and Financial Management. It is unclear in this study if the students with inferred low levels of Maths PSE and poor Maths SC started out with the former or latter. A path analysis study conducted by Pajares and Kranzler (1995) on the role of self-efficacy and general mental ability in mathematical problem-solving indicated that ability and self-efficacy had strong direct impacts on performance. Their findings also suggested that ability also had a significant direct influence on self-efficacy, which mostly facilitated the indirect influence of ability and related performance. In contrast, studies conducted by Bandalos, Yates & Thorndike-Christ (1995) on the effects of Math SC, PSE and attributions for failure and success on test anxiety indicated that it is the students' Math SC and not their Maths PSE that mediate the effect of prior Maths experience on Maths anxiety. According to Bong & Skaalvik (2003), since both PSE and SC constructs share many similarities, researchers at times struggle to distinguish the distinctive characteristics of what seems to be highly similar constructs. Nonetheless, like Pajares & Kranzler (1995), they also argued that EB acts as an active precursor of self-concept development.

The general indication here for the participants in this study with either poor self-concept and inferred low levels of PSE in the same domains is that they still held the belief that, if given no alternatives, they would try harder to succeed to achieve their overall goal of graduation from the programme. There are also strong indications that vicarious experience, such as having fellow classmates to study with, would help boost their PSE to persist.

Although Klorer & Stepan (2015) and Stewart (2015) reported that vocational education students in China suffer from stigmatisation as a result of failure to gain admittance into university pathway, there were no indications found in this study to suggest that the participants held low general academic self-concepts. However, the participants indicated that they held low self-concept in specific academic capabilities such as Maths and communication. This finding is consistent with studies conducted by Yang et al (2016) with Chinese VE students.

#### 4.4 How do the students select, weight and integrate sources of self-efficacy information into their PSE judgements?

In this study, mastery experience was found to be an important and consistent source of self-efficacy, as it provided a more authentic proof of capabilities, however, it was also reported to be variable by some participants in predicting future success and career decidedness. Whilst some participants regard failures and sub-standard performances as part and parcel of the learning process, others reported expectancies of high effort investment equating to high grades return on investment. Mastery experience is also more effective in enhancing PSE when the success was achieved under challenging conditions.

The findings also indicated that, although successes through mastery experiences are influential in enhancing PSE, individuals who engage in frequent self-doubt are more likely to impair their performance despite repeated previous successes. This is perhaps most prevalent in a competitive environment such as in competitive sports or in China where large number of students compete for limited places in the top education institutions in the country. Successes for these students meant being amongst the best, rather than simply performing well as an individual. Therefore, a performance-oriented learning environment may result in high achievers doubting their mastery experiences if they could not demonstrate continuous top-level performance. The findings also showed that those participants who have repeated failures from their past experiences, such as in Maths, would prefer to avoid this subject unless they had 'no choice'. The findings also indicated that vicarious experience might be a beneficial source of self-efficacy to encourage these participants with low Maths self-efficacy. In contrast, this study also found that some participants are willing to take the risks of attempting highly challenging activities to

test the limits of their capabilities; which suggests that these participants may have overcome past failures with determined effort. According to Bandura (1981),

*“...failures that are overcome by determined effort can instil robust percepts of self-efficacy through experience that one can eventually master even the most difficult obstacles.”* (p. 203).

Regarding vicarious experience, most of the participants confirmed that observing a fellow classmate or colleague with similar capabilities achieve success in a new task can enhance their PSE. However, the study also found that, should the participant fail to achieve the same level of success or better, their PSE would be undermined.

Findings for social encouragement indicated that effectiveness of the persuaders is dependent on integrity and value factors perceived by the individual. Although positive encouragements were generally effective, negative encouragements can also be effective in their EB enhancement if the participant perceives the persuader to believe in him/her. Social encouragement can be effective delivered verbally or non-verbally.

Physiological and emotional statuses reported were mainly related to negative physiological states such as anxiety, stress, nervousness, self-doubt etc. that threatened or impeded PSE. Findings showed that participants have developed their own self-regulating strategies to overcome these states of emotional upsets and to enhance their coping capabilities. The most common strategy reported was ‘self-talk’.

This study found that the participants' concept of achievement was generally influenced by their Chinese cultural expectation of continuous self-improvement through educational achievements. In a study of US and Chinese cultural beliefs about learning with college students, the results indicated that the Chinese students view knowledge as indispensable to one's life (Li, 2003). This view is consistent with Confucian understanding of learning – that knowledge extends beyond knowing the world, but includes social and moral knowing and that one seek learning to cultivate oneself as a whole in the moral domain towards 'self-perfection' (Li, 2001, 2002; Yu, 1996). According to Li (2003),

*“This need of knowledge and the seeking of it require that Chinese cultivate the desire to learn, engage in lifelong learning, remain humble, and adopt the action plan of diligence, endurance of hardship, perseverance, and concentration” (p.265).*

The participants at one point of the interview was asked to comment on a well-known Chinese idiom 'no pain, no gain' and what it meant to them.

CHERRY: *“This is a well-known sentence, and the meaning for me is how much effort you put, how much grades or achievements you will get. And it is always encourage me, sounds like my motto.”*

ANGEL: *“But sometimes, even if it cost much pain, you don't have anything come back. But in Chinese culture, you must try your best to do something even if nothing comes back to you. If you don't try, how can you be sure that you can't do these things?”*

JASON: *“Maybe if I can use the more effort, it will achieve more confidence. Because the simple way is easy. Maybe just the one time or twice. But if you can't prepare very good or very hard to handle the opportunities. If you are willing to do*

*the hard to use lot of effort, you will find it easier to handle the opportunities. You will be better.”*

The examples of narratives above indicate that the participants are familiar with the need to develop endurance for hard work to achieve success. In the following narrative from Ji, we could also see how important it is to not only be resilient but adaptive in learning as well.

Ji: “..... Yes, you need to put in a lot of effort to achieve just like my experience.”

INTERVIEWER: “What about when you have to put a lot of effort, but you still don't get success?”

Ji: *I won't give up. Maybe because of my personal emotion. I just want to succeed. I will try different ways.”*

These attributes are similar to the characteristics of students who believe that ability is incremental such as resiliency in spite of failure, enjoyment of challenges, adaptive in learning and working, and willingness to take academic risks (Dweck, 2006).

The participants' strong belief in effort investment in this study also indicated their which implied a concept of ability that is not fixed, but rather that ability can be increased with effort. Success was not perceived as achievable without effort investment.

MAY: “No. Smart people also need to study..... Yes, I agree. Some people can be born talented, therefore their manner to every work is not serious. They do not work hard so that others who work hard can be better than them.”

LILY: *"..... I think no effort, no success. I don't think anyone can directly gain success if they don't put in effort."*

JASMINE: *"I don't believe in born smart. The person born smart who got in at Tsinghua University at the age of 14, but before the 14, there are no news of what happened to this child before the age of 14. There was also no news of what happened with his life afterwards. Did he really achieve something?"*

LILY: *Maybe sometimes, there might be one or two people who have the smart mind, but not normal people. Normal people cannot do that. You also need your effort. If no effort, maybe you are just lucky..... even though you have gift on some skills, if you do not make any effort, then anyone will go beyond you.*

The above narratives, provide strong suggestions that innate fixed ability is a concept they generally do not subscribe to and but is recognised as an exception rather than the norm. However, they contend that even those who happen to be born smart or gifted with special talents will require to invest effort to develop those abilities. In a study conducted by Wilkens (2014) on efficacy of growth mindset intervention and student achievement, the results reported a relationship between efficacy and achievement. The results indicated that,

*"..... when students engage in effective study skills strategies, they are likely to have higher self-efficacy and in turn higher achievement." (p.168).*

Findings regarding the participants' internship experiences indicated that the real-life work experience helped to reinforce their mastery experience and strengthen their PSE and helped clarify their career decidedness. Although the findings indicated that, despite some of the participants' reported low ability in specific domains, which in turn influenced their SC and PSE in those related areas, there



were no indications that these factors hindered their persistence or effort investments to overcome these shortfalls.

In the next chapter, the conclusions, implications for practice, limitations and areas for future research will be discussed.

## **5.0 Chapter Five – Conclusion, Implications for Practice, Limitations and Implications for Future Research**

This purpose of this study is to understand the sources of self-efficacy of Chinese VE students at a higher VE institute. The sample population of fifteen Chinese students were recruited from a Sino-Australian joint-venture international hotel management business programme, at a higher vocational education institution in Eastern China. The findings from this study contributed further understanding of sources of self-efficacy, an understanding that is still limited - especially in the Chinese social context. In this chapter, the conclusions, the implications for practice, limitations of the study and suggestions for future research will be discussed, plus a Reflective Statement reviewing the author's experiences during the research.

### **5.1 Conclusions**

The findings of this research showed that the four sources of efficacy hypothesised by Bandura (1997) are influential in the development of EBs and indicated that each of these sources of self-efficacy can be utilised either on its own, or in combination, to enhance EBs. Although mastery experiences were regarded as the most effective source of self-efficacy in numerous researches (Britner & Pajares, 2006; Klassen, 2004; Lent et al., 1991; Lopez & Lent, 1992; Lopez et al., 1997; Pajares et al., 2007; Usher & Pajares, 2006a, 2006b)), this study found that mastery experience was not always effective in sustaining PSE, particularly in the situation when achievement goals were not met in a competitive environment. In a competitive environment, such as in competitive sports, success is measured by achieving a top three position in most sports. Maintaining a winning position in each competition is uncertain regardless of the strength of one's PSE. In addition, the

athlete must keep his/her physical skills and strength at prime level. This suggested that the uncertainty of winning despite one's previous mastery experiences places doubt in the goal achievement, without necessarily undermining PSE on actual related skills. For example, knowing that one is a competent swimmer to be selected to compete at a district or national level does not guarantee a winning position; thus, this high PSE in one's capability as a swimmer does not necessarily result in high achievement. When high PSE in ability does not result in the highest level of achievement as anticipated by the individual, he/she may feel betrayed by their high EB in this domain. Similarly, students who possess high PSE in academic studies and set high achievement goals may also nurture self-doubts that they are not academically good enough especially when they do not achieve the level of academic achievement they set themselves. Therefore, if individuals are plagued by self-doubts, then even the most talented individuals find it difficult to use their abilities effectively under conditions that undermine their self-beliefs (Bandura & Jourden, 1991; Wood & Bandura, 1989). PSE does not encompass skills measurement, but rather a belief in what one can do with the skills one possesses under varying conditions or circumstance, therefore further study is needed to understand the extent that failures in attaining high achievement goals affect the PSE of high achievers over extended period.

In this study, sources of self-efficacy were also found to function both as an enhancer of EB and as an impediment to EB development, depending on how individuals interpret their failure and success experiences. This study also found that more than one source of self-efficacy can be integrated to enhance self-efficacy when attempting new tasks or in challenging physiological and emotional situations.

The findings also indicated that for some of the participants, their internship experience in industry helped enhance their career self-efficacy and personal self-efficacy through mastery in an authentic work environment and recognition of mastery and social encouragement by their work colleagues and supervisors. Although internship is considered an important element of vocational education programmes in the provision of authentic work experience, it is also important to assist students who are undecided about their career choice as found in this study. Betz & Vuyten (1997) suggested that the level of an individual's PSE is one of the strongest predictors of career indecision, however this study found that some of the participants were able to confirm that they will not pursue a career in hotel management even though they were able to perform successfully in their internships indicating that career decidedness is influenced by more than PSE and actual capabilities.

Contrary to some researchers' arguments that EB is not relevant to achievement for Chinese students, the participants in this study indicated that PSE or self-belief is important for success. The indications from the participants' narratives inferred that they held relatively robust beliefs in themselves (see Table 4.5) and their abilities to regulate their efforts to achieve success in their studies. This is consistent with Bandura's (2006) claim that

*"The stronger the sense of personal efficacy, however, the greater the perseverance and the higher the likelihood that the chosen activity will be performed successfully" (p.314).*

Nevertheless, there were a few reports of inferred lack of Maths and Accounting PSE, but no other evidence was found to provide any inferences of the participants' general low levels of EBs in themselves, their coping efficacy or their

academic pursuits. The participants' self-reported inferred levels of general PSE were found to be more aligned or calibrated with their self-reported inferred academic performance. This suggests that individuals with low levels of academic PSE in specific domains may not necessarily reflect potential overall low academic success. It is also important here to reiterate that all levels of PSE are inferred and are not based on any tested PSE measurement scales as understood by Bandura.

There were strong indications that most of the participants believe that ability is not fixed, and that knowledge and skills are incremental through effort investment (Blackwell et al., 2007; Dweck, 2000; Dweck, 2008; Dweck & Leggett, 1988; Hong et al., 1999; Robins & Pals, 2002). This concept of ability could explain their acceptance of their previous underachievement or failure as part and parcel of the learning process to gain new skills and knowledge, and that persistence and perseverance is necessary when faced with challenges or adversities. In the cases whereby the participants have experienced failures in their previous performance, such as in Maths, their low Maths efficacy was reported to be transferred to their PSE and SC of their Accounting and Financial courses. Despite having experienced academic failures previously that subsequently excluded them to access the normal academic pathway in the Chinese Education System (Figure 1.1), the participants in this study have all successfully completed four out of their five year Associate Degree in Business – International Hotel Management, therefore the findings are important and encouraging, indicating that students' self-efficacy can be improved and developed – per previous empirical studies (Bandura, 1989; Bandura & Dweck, 1985; Dweck & Leggett, 1988; Nicholls, 1984). When comparing their learning experiences on the SAJVP, there are some indications from the participants'

narratives to suggest that their academic performance and PSE have benefited from the collective efficacy of the Australian component of their programme.

This study also found that, although Bandura's (1977) SET espoused that those individuals with high PSE will exert more effort to achieve, whilst those with low PSE will tend to avoid related tasks or give up easily, some participants also pushed themselves to attempt activities in which they had low PSE when they had no choice. In situations when the participants reported having no alternative course of action, short of dropping out of the programme, they increased their effort to try to provide themselves the chance to pass these courses, even if the grades achieved may not be as high as they would prefer. This strong belief in effort investment is consistent with previous studies (Hau & Salili, 1996; Lee et al., 1990; Watkins & Chen, 1995) on Chinese students' academic achievements. The findings in this study found that, although effort investment is necessary for success, the participants highlighted that they must first have the EB that they can succeed, indicating that having belief in their ability to succeed motivates them to invest the necessary effort. The effectiveness of their strong effort belief in achievement also suggests their ability to self-regulate learning, which is consistent with studies on PSE for self-regulated learning to be highly predictive of students' effective effort investment and use of self-regulatory strategies across academic domains (Bandura et al., 1996, 2001; Bandura et al., 2003; Bong, 2001; Pajares, 2007; Zimmerman & Bandura, 1994). This strong effort-focused conception of learning could also be interpreted as contributing to their needed sense of autonomy over their learning, since they can control how much effort they invest towards their achievements and affirms a culture of continuous self-improvement. This culture of continuous-self-

improvement has been espoused by also by some researchers (Hsu & Wu, 2015; Wang & Li, 2003) as part of Confucian philosophy for personal development.

The findings in this study also indicated that Chinese parents have the highest potential in influencing their children's self-efficacy development, if they cultivate a less judgmental, more open, trusting relationship and are made aware that their children regard them as role models even in the subtlest of action. Although the sources of self-efficacy were found to be consistent with Bandura's (1977) SET, this study also found that self-encouragement is an important source of self-efficacy especially when the participants were negatively affected by physiological and emotional conditions such as anxieties, nervousness. Self-encouragement in the form of self-talk was reported to be adopted by several participants help them overcome self-doubt in stressful situations such as class presentations. Studies on self-talk has been mainly concentrated in the sports domain and the studies on self-talk in relation to self-efficacy is limited (Hardy et al., 1996; Hardy, 2006; Zinsser, 2006). This study indicates that self-encouragement in the form of self-talk is also effectively as a source of self-efficacy in educational setting to overcome self-doubt.

## **5.2 Limitations and Implications for Future Research**

The qualitative approach adopted in this study collected a large quantity of data that provided richness and value for in-depth analysis. However, as the context of this study was quite specifically focused on a representative group of students on a Sino-Chinese higher vocational programme who have successfully progressed through four of their five years study programme and did not include any students who have dropped out. According to Hampton & Mason (2003) and Usher & Pajares (2006a), they found evidence that students with different academic competence level

report different degrees and sources of efficacy, for example, their studies found that students with learning disabilities or who are registered in remedial classes report weaker influence from mastery experience, vicarious experience and social encouragement, and are prone to higher anxiety. The inclusion of students who have dropped out from this SAJVP could provide understanding of the relationship between sources of self-efficacy and academic ability. Further research also needs to expand the scope to include students from other Chinese vocational institutions and other vocational programmes in China to ascertain if the findings from this study are consistent within other Chinese education environments. A similar study comparing students in VE and students from non-VE streams in China could also provide additional information to add to our current understanding. China is a vast country with a diverse ethnic community and varying economic development in each region. Therefore, studies involving Chinese students in the various regions of China would provide a broader spectrum coverage and enable generalisability.

### **5.3 Implications for Practice**

VE graduates are crucial to China's economic reform agenda and the development of a highly skilled workforce for the nation. Therefore, institutional leaders and teachers in VE need to recognise the benefits of EB development in students to help them overcome any feelings of inadequacy in their studies. It would also be beneficial to reinforce the culture of incremental mind-set (Dweck, 2006) to reaffirm that learning new strategies, perseverance and effort can lead to academic achievements as well as to overcoming previous negative learning experiences. This research contributes to our understanding of sources of self-efficacy development and can help improve the design of learning experiences that provide positive EB development for underachieving students in a competitive learning environment. In



the context of VE in China, this study is beneficial to improving the quality of the VE students' learning experiences, such as challenging, meaningful and relevant learning experiences that will prepare them well for their chosen industry career, which in turn is also essential to the development of a highly skilled workforce for China.

The triadic reciprocal nature of the human functioning in SCT (Bandura 1977, 2011), whereby self-efficacy is a significant concept, theoretically makes it possible for Intervention efforts in education to be directed at personal, environmental or behavioural factors. Educational researchers such as Bandura (1997), Urdan and Pajares (2006) and Zimmerman (2000) suggested that it is possible for teachers to provide support to students to learn to manage their PSE, to encourage persistence, self-regulation, and subsequent achievement. For example, educators can develop strategies to improve students' affective status, self-belief and thinking habits (personal determinants), enhance their academic skills and self-regulating approach (behavioural determinants) and develop and implement institution and classroom structures that would be more conducive to student success (environmental determinants). Furthermore, teachers can teach students about their thought processes by providing more stable reasoning tools to guide their decision-making processes (Bandura, 1997; McPherson & Zimmerman, 2002). Bandura (1986a) also emphasised that the important factor in EB development is acknowledging that, if students believe they can develop the skills required to be successful in their academic and personal goals, they will persevere with education, training, and job seeking. Instructional strategies to increase students' PSE can be modified with minimal training and effort: for example, by using the four major sources of self-efficacy discussed in the next section of this chapter, to assist students to enhance their EBs in their capabilities to attempt future tasks. Teachers

who capitalise on the positive effects of these sources of self-efficacy, such as past performances, observations of others as models, and verbal persuasion, can increase students' confidence and students' belief in their capabilities.

## **5.4 Teacher as the Environmental Factor**

Teachers' feedback impacts on students' PSE and, from the SCT perspective, constitutes an environmental variable (Schunk & Zimmerman, 1997; Schunk, 2003). Students' perceptions of their capabilities are crucial to their performance. For example, students who perceive a lack of capabilities, when in reality they are capable of achievement, inhibit their personal growth and experience. Likewise, when students possess an over-inflated sense of PSE, it can result in failure and frustration. Therefore, by assisting students to develop an accurate appraisal of their performances, the teacher can provide feedback that convinces students with low PSE that their performance achievement is within their control. At the same time, when students have a more accurate evaluation of their abilities, it can reduce the likelihood of the development of overinflated PSE. Research performed by Bandura (1986a) has demonstrated that persons with high PSE set higher aims and performance standards, persist longer and do not give up easily in their pursuit, are more open to challenges or attempt riskier endeavours, are more resilient to setbacks, and are less susceptible to the emotions of fear, anxiety, stress, and depression, and that these characteristics can be taught and mentored.

### **5.4.1 Mastery Learning Experiences**

Teachers play an essential role in determining students' mastery experiences, as they set assessment standards. For example, the Chinese partner of the SAJVP set their pass mark at sixty percent, while the Australian partner set theirs at fifty

percent and the pass grade range is between fifty to sixty percent. Hence, when the participants in this study talked about passing not being good enough in terms of academic achievement, they were expressing their concern that, from a Chinese grading perspective, the pass grade range is still perceived as a failure. Therefore, different reference standards produce different interpretations of achievement that in turn affect students' PSE appraisal. Hence, it is important to explain to students why evaluative standards can differ between institutions, and that a lower passing score set by one institution than set by another does not necessarily reflect lower performance standards.

As prior achievements are the most authentic sources of EBs' enhancement (Bandura, 1997), teachers should design courses to expose students to learning experiences with high success probability in order to increase their mastery experiences. Although most competencies, especially the complex ones, take time to develop and require repeated periods of exposure to become enduring, temporal achievements nevertheless have positive implications. Competencies can be scaffolded by organising skills and knowledge into a hierarchical order; progressively stepping up the level of difficulty and challenge, as each level of skills is successfully achieved (Power, 2019). According to Bandura (1997), those who experienced intermittent failures, but continue to improve with incremental success, are more likely to raise their PSE than those who achieved success but did not see improvement in their performances compared to their prior performance. How cumulative experiences influence the individual's PSE is dependent on how the relative frequency of successes and failures is perceived and evaluated, including the context in which they occurred. As observed in this study, students' PSE are also more inclined to be strongly enhanced when individuals felt challenged by activities

which demanded some degree of effort investment. Furthermore, when academic success is easy to attain, especially for many in the same class, the effectiveness of EB enhancement was found to be weakened. According to Bandura (1997), when individuals are accustomed to experiences of easy success, they are also inclined to develop quick result outcome expectancy and subsequently become easily disheartened by failure experiences. Therefore, in order to build a robust sense of PSE, experiences in overcoming difficulties through perseverant effort in learning activities are necessary. In other words, challenging learning experiences provide the students with opportunities to learn how to convert failures into successes by improving their abilities to increase control over them. Moreover, knowledge and skills often do not produce high achievements unless students feel confident that they can use them well; hence deficient performance occurs more often from lack of practice rather than from deficient cognitive skills. Therefore, students need to be furnished with effective rules and strategies as well as encouraged to practise them regularly to enhance their effectiveness.

#### **5.4.2 Vicarious Learning Experiences**

Vicarious experiences may be highly beneficial to students who are trying to overcome negative perceptions of learning difficulties. Students can be assisted to increase their sense of EB in learning new skills through observing role models. However, care needs to be taken to select models that are similar to the observer, for example, similarity in ethnicity, gender, age, and capabilities. Where human models are not available, books, videos and the internet provide alternative source options. Care should be taken in structuring vicarious experiences in ways that would inspire and enhance EB whilst avoiding adverse social comparison for the observer. The modelling situation is regarded as an opportunity to use a proficient

model to demonstrate one's abilities. The combination of self-comparison of skill improvement with pre-emptive upward comparison with credible proficient models lends support to an optimistic self-evaluation of PSE, despite existing deficiencies in skill.

Vicarious reinforcement can also be provided through the observation of senior peers who have already progressed successfully. For example, one participant in this study gave the example of attending the graduation ceremony of his peers helped him to visualise his graduation from the programme.

#### **5.4.3 Social and Verbal Encouragement Strategies**

The findings from this study highlighted that Chinese teachers and parents are not accustomed to providing verbal encouragement. However, the participants indicated that verbal encouragement provided by their western teachers positively enhanced their EB. Furthermore, any expression of support and belief from significant others, especially by their teachers and industry managers, allowed the participants to feel validated, empowered and overcome feared experiences. However, one should be cautious to use verbal encouragement sincerely to avoid losing its credibility. Social encouragement is more believable when the encouragement provided help the individual achieve slightly beyond his/her capability at the time. In other words, by encouraging someone to attempt a task that is far beyond their capability would set them up to fail and weaken the credibility of the persuader. Students can be taught to use better strategy choice and added effort to achieve tasks that are slightly beyond their capability. According to Bandura (1997), those who are convinced they can succeed are more likely to test different strategies and expend the necessary effort than those who are troubled by self-doubt. Subsequent performance successes, in turn, raise the perceived diagnostic

competence of the persuaders. However, inflated persuasive appraisals that mislead students into repeated failures undermine the diagnostic credibility of the persuaders and further reinforce the students' belief in their inherent limitations. The optimal level of disparity will also vary depending on whether deficient performances reflect basic skills deficits or represent ineffectual use of pre-existing skills. In the misuse case, performance gains are achievable by convincing the individuals that they have what it takes to succeed. Self-efficacious thinking fosters effective use of skills. Hence it is important for teachers to make accurate evaluation of students' skills and potential as, in the event where necessary skills are deficient, social encouragement alone cannot substitute for skill development. In such situations, convincing the individual that he/she is much more competent than his/her PSE is unlikely to result in actual achievement. Peers can also be effective resources to lend support through verbal encouragement, especially in group work and general social matters, as their similarities in age and environment can promote empathy.

#### **5.4.4 Physiological and Emotional Status Management**

Physiological and emotional status represents the fourth major source of SE. Somatic information communicated by one's physiological and emotional states is often used to evaluate one's PSE. Therefore, teachers can help improve students' physiological and emotional status by assisting them to lower their anxiety or stress levels, and any negative emotional predisposition, and rectify any misinterpretations of physiological and emotional states (Bandura, 1992; Cioffi, 1991). In this study, it was found that self-talk, verbal and non-verbal encouragement from teachers and peers were most effective helping the participants overcome anxious and stressful situations to lead them to the completion of feared endeavours.

## 5.5 Implications for VE Practice in China

Vocational education (VE) is considered as pivotal to the success of China's economic development and modernization as it plays a vital role in the development of students' professional skills and knowledge. Unfortunately, vocational education in China is still perceived as of lower status than general higher education (Li & Song, 2014) and the community also considers the academic achievements of VE students at large to be of lower value and inferior to that of university students (Ran & Chen, 2014). Since 2014, the Chinese government has increased its focus and emphasis on the value of VE and hopefully this will also improve the way the nation regards VE (Xinhua Net, 2014). This study contributes to a better understanding which can improve the quality of the Chinese VE students' learning experiences, to enhance their academic success and contribute to the development of a highly skilled workforce. The findings of this research may also be beneficial to the education practitioners who work closely with Chinese students in vocational education, as well educators who are interested in helping students of Chinese ethnic background who are considered as under-achievers, to develop their academic self-efficacy. At an institutional level, the findings also indicated that the collective efficacy the participants experienced in the Australian component of the SAJVP helped improve their diligence and motivation to work harder to succeed in their academic endeavours which in turn enhanced their EBs. The collective systems such as classrooms, faculty, and administrators can operate as a whole to develop a conducive environment to enhance students' learning (Bandura, 2000).

## 5.6 Summary

SET is an extension of Bandura's (1977) SCT, which explains the cognitive factors that influence whether people develop and use their mental and behavioural skills needed to undertake challenging tasks. Bandura (1977) hypothesised that people have beliefs about their abilities, which he calls "efficacy expectancies," and beliefs about the contingencies operating in the environment, which he calls "outcome expectancies." If students believe they can develop the skills required to be successful in their academic and personal goals, they will persevere to achieve success. If, on the other hand, they believe that they either do not have or cannot develop the skills required or believe developing the skills will not yield the findings they want, they are unlikely to persevere in the pursuit when faced with obstacles. According to Bandura (1986a), the importance of self-efficacy is recognising that personal beliefs about abilities, and the outcomes likely to occur from using those skills, are strong predictors of peoples' behaviour. The reciprocal characteristics of the personal, environmental and behavioural determinants of human functioning in SCT make it possible for intervention efforts on education to be focused on them. Teachers can develop strategies to improve students' affective status, self-belief and thinking habits (personal determinants), enhance their academic skills and self-regulating strategy (behavioural determinants), and develop and implement institution and classroom structures that would be more conducive to student success (environmental determinants). Therefore, understanding the factors that may be used for predicting, assessing and facilitating academic success is beneficial to educators. This study adds an important dimension to the literature on predictors of Chinese students' academic performance. Academic achievement is a standard measurement of students' success, not just in China, but also in other countries, and the end usage of understanding sources of self-efficacy is primarily to enhance



students' achievement outcomes and their EBs for future endeavours. Research such as this study can inform practitioners how to support students in developing their intellectual capabilities, as well as their EBs and self-regulatory capacity, to become lifelong self-directed learners.

## 6.0 Reflective Statement

This EdD doctoral journey represents my longest stretch of professional education, spanning over seven years by the time I graduate. Although I started my EdD Thesis stage in January of 2016, I had begun conducting literature review a couple of years before then. Initially, I wanted to conduct my research on how to develop self-efficacy with my students in Thailand who are from Indo-China, India, Bangladesh, Myanmar, Nepal, Bhutan and China. However, after consultation with several EdD tutors at the University of Liverpool during my Residency in July 2015, I was made aware that my scope was too broad, and I should narrow my focus to one specific ethnic group since I would be adopting a qualitative approach to seek understanding of how self-efficacy is developed with this group of students. The decision to focus on Chinese students has also many benefits in that I had eleven years of work experience in VE in China; even if it was mostly in administration. Research into Chinese students' self-efficacy consistently reported low self-efficacy measurements in comparison with their western counterparts (Salili et al., 2004; Rogers, 1998). With the increasing and continuing trend of Chinese students going abroad for further education, the benefits of such a research project were most encouraging.

Data collection was my favourite part of the thesis, as I met with my volunteer participants face to face. My years of experience with Chinese students in China led me to develop the assumption that the students would be shy and restrained in their communication: hence I decided to travel to China to conduct the interviews. I felt that this was more personal and could ease their shyness. However, I was most surprised and excited at the openness of the students to participate in my research

project and to share their learning experiences. They were also not restrained in communicating their thoughts and feelings: which was quite different from the preconceived assumption. This could be because, even though I am a teacher, I was not their teacher, but a visitor to their institution.

The data collection stage was followed by the data analysis stage which involved teaching myself many new skills, such as how to transcribe interviews, use NVivo Pro 11, coding and theming the data. It was also the lengthiest and most cognitively engaging part of the thesis. Once the data were coded and themed, the writing up part was another major endeavour. Although, at that stage, one took comfort in knowing that the approved Thesis Proposal contained the initial drafts of the first three chapters of the thesis, one soon discovered that these were only skeletal drafts and needed major rewriting as I gained better understanding of my research. I kept a reflective journal and recorded important revelations and shifts in thinking, a strategy that helps to facilitate reflexivity (Ahern, 1999; Russell & Kelly, 2002). Russell & Bohan (1999) define reflexivity as practice of honouring oneself and other contributors to our work through acknowledging the awareness of the relational and reflective nature of the task.

At the end of October 2016, I wrote that, up until the previous week, I had doubted my ability to write two thousand five hundred words per week to meet my targeted thesis completion deadline in March 2017. The important revelation in that journaling was that I arrived at the awareness that it was not so much about the ability to write that many words per week, but rather the preparatory work, such as reviewing supervisors' feedbacks, followed by understanding the meaning behind their comments, further reading, reviewing what has been written and revising. It was

at this stage of my thesis that I understood that my deadline was over optimistic and that my approach to writing my thesis would take at least double the time I initially projected. At the same time, I also wrote a separate note that said; *“if your confidence is strong enough, even landing on the moon is not difficult.”* This was a reminder to myself to maintain my self-efficacy: that, despite the doubling in time needed to complete my thesis, I can still accomplish this. This ‘self-talk’ or self-encouragement (Hardy, 2006) would become more frequent as the months ticked over into yet another year.

In April of 2017, I journalised that I lacked self-efficacy in academic writing. I felt that I was not writing fluently, and the English seemed awkward. There were many grammatical errors in my written work as reviewed by Grammarly and I was not picking up spelling mistakes during proof-reading. More importantly, I was not articulating ideas as well as I want to or am able to do at times. I realised that living and working in non-English speaking environments in China and now in Thailand for the past two decades had taken its toll on my academic English development. From a positive point of view I discovered that, as I was writing, I was gaining new understanding of the literature. As the time progressed with the thesis, I have re-read many major literatures related to my research several times. Each time, I surprised myself that I have picked up some important information I missed and wondered how I could miss something so obvious or relevant. As I re-read the literatures either several weeks or months later, they became more meaningful. This made me realised that, even as a mature-age experienced learner, learning takes time. How I relate with the text and understand what the author is trying to convey is also dependent on my ‘readiness to learn’. The term ‘readiness to learn’ used here is not the same as the lifespan theories developed by Lindeman (1926), Havinghurst

(1953, 1972), Erikson (1959), Maslow (1972, 1987), Knowles (1989) and Knowles, Holton & Swanson (2012). Their theories made assumption that life stages are related to age with certain events happening at each stage. My readiness to learn in this instance refers to my cognitive readiness to understand what I have read from the literature and during data analysis. There were trigger factors to the 'ah hah' moments of understanding. At times things that happened at work, in class or something I had watched on television or the re-reading of the literature after a short break from the last read. There is a saying that I heard at a graduation speech many years ago that describe this learning phase I was experiencing and it is "you don't know what you don't know". This awareness also added to my concerns that I don't know enough and is a constant reminder of how much there is to learn as a novice researcher. This learning experience is of significant importance as it helped me empathise with the participants in my research. For example, when self-doubts crept in at the most unexpected moments in the final thesis revisions stage when I felt confident that I had achieved standards for submission, only to find that my assumptions were inaccurate and further revisions were needed. These moments also enabled me to empathise with how Moon, one of the participants in this study, felt about mastery experiences being unreliable and that sense of self-betrayal she talked about. As the writing dragged from months into years and my fellow classmates started graduating, the social comparison was increasingly undermining one's self-efficacy (Brown & Inouye, 1978; Schunk, 1987), so much so that the excitement of sharing one's progress ceased to become relevant. This behaviour was noticed amongst all fellow EdD colleagues who are lagging behind. As the support from peers decreased over the duration of the thesis module, the support from the supervisors, especially the primary supervisor, also increased and became more critical. The supervisors' support was provided through continuous challenged

to improve the thesis to a standard expected of a British higher education institution. Feedbacks were not always at once fully understood, which in turn affected the number of times the same manuscript had to be revised. At times, these feedbacks also contributed to the manifestation of self-doubts (Evans, 2013). During these moments of self-doubt, I found that it was necessary to cultivate emotional resiliency by reminding myself of the amount of time and financial investment made already towards this programme of study. The ability to exercise emotional resiliency represents my sense of agency that is important to help me overcome these challenging moments to see my endeavours to fruition. The American Psychological Association (2014) defines resilience as:

*“...the process of adapting well in the face of adversity, trauma, tragedy, threats or even significant sources of stress (para. 4).”*

In conclusion, this learning journey not only pushed me out of my professional comfort zone, from that of a confident and accomplished education administrator to a novice researcher, it allowed me to empathise with my students who have to cope with knowledge, skills and language gaps in their studies. As I became a more reflexive learner, it became more evident that learning takes time, mastery takes time and it is a continuum, and to gain deep understanding also takes time. It often requires an incubation period. Moustakas (1990) describes the incubation period as

*“The period of incubation allows the inner workings of the tacit dimension and intuition to continue to clarify and extend understanding on levels outside the immediate awareness” (p.28).*

Finally, this journey is also the most rewarding academic learning experience.

## REFERENCES

- Ahern, K. J. (1999). Ten Tips for Reflexive Bracketing. *Qualitative Health Research*, 9(3), 407–411. <https://doi.org/10.1177/104973239900900309>
- Ahn, H. S., Usher, E. L., Butz, A., & Bong, M. (2016). Cultural differences in the understanding of modelling and feedback as sources of self-efficacy information. *British Journal of Educational Psychology*, 86(1), 112-136.
- Altbach, P. G. (2014). Chinese challenges: Toward a mature academic system. *Global Opportunities and Challenges for Higher Education Leaders: Briefs on Key Themes*, 83.
- American Psychological Association. The road to resilience. Washington, DC: American Psychological Association; 2014. Retrieved from <http://www.apa.org/helpcenter/road-resilience.aspx>. [Google Scholar]
- Athens, L. (1994). The self as a soliloquy. *Sociological Quarterly*, 35(3), 521-532.
- Baker, J. A., Terry, T., Bridger, R., & Winsor, A. (1997). Schools as caring communities: A relational approach to school reform. *School Psychology Review*.
- Ball, E. C. (2010). Annotation an effective device for student feedback: A critical review of the literature. *Nurse education in practice*, 10(3), 138-143.
- Bandalos, D. L., Yates, K., & Thorndike-Christ, T. (1995). Effects of math self-concept, perceived self-efficacy, and attributions for failure and success on test anxiety. *Journal of educational psychology*, 87(4), 611.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioural change. *Psychological Review*, 84, 191-215.

- Bandura, A. (1981). Self-referent thought: A developmental analysis of self-efficacy. *Social cognitive development: Frontiers and possible futures*, 200(1), 239.
- Bandura, A. (1982). The psychology of chance encounters and life paths. *American psychologist*, 37(7), 747-755.
- Bandura, A. (1986a). Social foundations of thought and action: *A social cognitive theory*. Prentice-Hall, Inc.
- Bandura, A. (1986b). The explanatory and predictive scope of self-efficacy theory. *Journal of social and clinical psychology*, 4(3), 359-373.
- Bandura, A. (1986c). Fearful expectations and avoidant actions as coeffects of perceived self-inefficacy.
- Bandura, A. (1989). Human agency in social cognitive theory. *American psychologist*, 44(9), 1175.
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational behavior and human decision processes*, 50(2), 248-287.
- Bandura, A. (1992). Self-efficacy mechanism in psychobiologic functioning. *Self-efficacy: Thought control of action*, 2.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational psychologist*, 28(2), 117-148.
- Bandura, A. (1994). Self-efficacy, In VS Ramachaudran (Ed.), *Encyclopedia of Human Behavior* (Vol.4. pp71-81). New York: Academic Press.
- Bandura, A. (1995). On rectifying conceptual ecumenism. In *Self-efficacy, adaptation, and adjustment* (pp. 347-375). Springer, Boston, MA.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. Macmillan.
- Bandura, A. (1998). Exploration of fortuitous determinants of life paths. *Psychological Inquiry*, 9(2), 95-99.



- Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current directions in psychological science*, 9(3), 75-78.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual review of psychology*, 52(1), 1-26.
- Bandura, A. (2004). Social cognitive theory for personal and social change by enabling media. *Entertainment-education and social change: History, research, and practice*, 75-96.
- Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on psychological science*, 1(2), 164-180.
- Bandura, A. (2007). Much ado over a faulty conception of perceived self-efficacy grounded in faulty experimentation. *Journal of Social and Clinical Psychology*, 26(6), 641-658.
- Bandura, A. (2011). Social cognitive theory. *Handbook of social psychological theories*, 2012, 349-373.
- Bandura, A. (2012). On the Functional Properties of Perceived Self-Efficacy Revisited. *Journal of Management*, 38(1), 9–44. <https://doi.org/10.1177/0149206311410606>
- Bandura, A., & Cervone, D. (1986). Differential engagement of self-reactive influences in cognitive motivation. *Organizational behavior and human decision processes*, 38(1), 92-113.
- Bandura, A., & Jourden, F. J. (1991). Self-regulatory mechanisms governing the impact of social comparison on complex decision making. *Journal of personality and social psychology*, 60(6), 941.
- Bandura, A., Adams, N. E., & Beyer, J. (1977). Cognitive processes mediating behavioural change. *Journal of personality and social psychology*, 35(3), 125.

- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Multifaceted impact of self-efficacy beliefs on academic functioning. *Child development*, 67(3), 1206-1222.
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (2001). Self-efficacy beliefs as shapers of children's aspirations and career trajectories. *Child development*, 72(1), 187-206.
- Bandura, A., Caprara, G. V., Barbaranelli, C., Gerbino, M., & Pastorelli, C. (2003). Role of affective self-regulatory efficacy in diverse spheres of psychosocial functioning. *Child development*, 74(3), 769-782.
- Bandura, M., & Dweck, C. S. (1985). The relationship of conceptions of intelligence and achievement goals to achievement-related cognition, affect and behaviour. *Unpublished manuscript, Harvard University*.
- Beaumont, C., O'Doherty, M., & Shannon, L. (2011). Reconceptualising assessment feedback: A key to improving student learning. *Studies in Higher Education*, 36, 1–17. doi:10.1080/03075071003731135
- Bembenutty, H. (2007). The last word: An interview with Frank Pajares: God, the devil, William James, the Little Prince, and self-efficacy. *Journal of advanced Academics*, 18(4), 660-677.
- Bernard, H. R. (2002). Research methods in anthropology: Qualitative and quantitative methods. Walnut Creek.
- Bertaux, Daniel (1981). From the life-history approach to the transformation of sociological practice. In Daniel Bertaux (Ed.), *Biography and society: The life history approach in the social sciences* (pp.29-45). London: Sage.
- Betz, N. E., & Vuyten, K. K. (1997). Efficacy and outcome expectations influence career exploration and decidedness. *The Career Development Quarterly*, 46(2), 179-189.

- Binkofski, F., Amunts, K., Stephan, K. M., Posse, S., Schormann, T., Freund, H. J., & Seitz, R. J. (2000). Broca's region subserves imagery of motion: a combined cytoarchitectonic and fMRI study. *Human brain mapping, 11*(4), 273-285.
- Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child development, 78*(1), 246-263.
- Bong, M. (2001). Between-and within-domain relations of academic motivation among middle and high school students: Self-efficacy, task value, and achievement goals. *Journal of educational psychology, 93*(1), 23.
- Bong, M., & Skaalvik, E. M. (2003). Academic self-concept and self-efficacy: How different are they really? *Educational psychology review, 15*(1), 1-40.
- Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. Sage.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology, 3*(2), 77-101.
- Britner, S. L., & Pajares, F. (2006). Sources of science self-efficacy beliefs of middle school students. *Journal of Research in Science Teaching: The Official Journal of the National Association for Research in Science Teaching, 43*(5), 485-499.
- Brown, I., & Inouye, D. K. (1978). Learned helplessness through modelling: The role of perceived similarity in competence. *Journal of personality and social psychology, 36*(8), 900.
- Brummelman, E., Crocker, J., & Bushman, B. J. (2016). The praise paradox: When and why praise backfires in children with low self-esteem. *Child Development Perspectives, 10*(2), 111-115.

- Burgess, R. G. (1984). Methods of field research 2: Interviews as conversations. *In the field: an introduction to field research*, 101-122.
- Bussey, K., & Bandura, A. (1999). Social cognitive theory of gender development and differentiation. *Psychological review*, 106(4), 676.
- Carver, C. S., & Scheier, M. F. (1981). The self-attention-induced feedback loop and social facilitation. *Journal of Experimental Social Psychology*, 17(6), 545-568.
- Central Committee of the Communist Party of China (2015). The 13<sup>th</sup> Five-Year Plan for Economic and Social Development of the People's Republic of China (2016-2020), Compilation and Translation Bureau, Central Committee of the Communist Party of China Beijing, China, Central Compilation & Translation Press.
- <http://en.ndrc.gov.cn/newsrelease/201612/P020161207645765233498.pdf>  
accessed 30 June 2017.
- Chan, C. K., & Rao, N. (2010). The paradoxes revisited: The Chinese learner in changing educational contexts. In *Revisiting the Chinese learner* (pp. 315-349). Springer, Dordrecht.
- Chase, M. A., Magyar, T. M., & Drake, B. M. (2005). Fear of injury in gymnastics: Self-efficacy and psychological strategies to keep on tumbling. *Journal of sports sciences*, 23(5), 465-475.
- Chen X, Huang Q, Rozelle S, Shi Y, Zhang L, 2009. Effect of migration on children's educational performance in rural China. *Comp. Econ. Stud* 51, 323–343.
- Chen, C., & Uttal, D. H. (1988). Cultural values, parents' beliefs, and children's achievement in the United States and China. *Human Development*, 31(6), 351-358.

- Chen, X., Chen, H., Kaspar, V., & Noh, S. (2000). Adolescent social, emotional, and school adjustment in mainland China. *International Journal of Group Tensions*, 29(1-2), 51-78.
- Cioffi, D. (1991). Beyond attentional strategies: A cognitive-perceptual model of somatic interpretation. *Psychological bulletin*, 109(1), 25.
- Cohen, J. R., Sheshko, D. M., Ames, A. M., Young, J. F., Hansford, A. P., Zhu, X., & Abela, J. R. (2015). Self-Perceived Competence in Mainland China: A Multiwave Longitudinal Examination of Internalizing Symptoms in Chinese Adolescents. *Journal of research on adolescence*, 25(3), 564-579.
- Cooper, S. E., & Robinson, D. A. (1991). The relationship of mathematics self-efficacy beliefs to mathematics anxiety and performance. *Measurement and Evaluation in Counseling and Development*.
- Crabtree, B. F., & Miller, W. L. (1999). Using codes and code manuals: a template organizing style of interpretation. *Doing qualitative research*, 2, 163-177.
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches*. Sage.
- Creswell, J. W. (2014). *Research design: International student edition*. Los Angeles, CA; Sage.
- Crouch, M., & McKenzie, H. (2006). The logic of small samples in interview-based qualitative research. *Social science information*, 45(4), 483-499.
- Crozier, J. (2002). A unique experiment. *China in Focus*, Issue 12. <http://www.sacu.org/examinations.html>. Accessed 1 July 2017
- Crundall, I., & Foddy, M. (1981). Vicarious exposure to a task as a basis of evaluative competence. *Social Psychology Quarterly*, 331-338.
- De Lauretis, T. (1984). *Alice doesn't: Feminism, semiotics, cinema* (Vol. 316). Indiana University Press.

- Dijkstra, P., Kuyper, H., Van der Werf, G., Buunk, A. P., & van der Zee, Y. G. (2008). Social comparison in the classroom: A review. *Review of educational research*, 78(4), 828-879.
- Duan, C., Lv, L., & Zou, X. (2013). Dangqian woguo liudong renkou mianlin de zhuyao wenti he duice (Major challenges for China's floating population and policy suggestions: An analysis of the 2010 population census data). *Renkou Yanjiu (Population Research)*, 37, 17-24.
- Duval, S., & Wicklund, R. A. (1972). A theory of objective self-awareness. New York, Academic Press.
- Dweck, C. S. (1986). Motivational processes affecting learning. *American psychologist*, 41(10), 1040.
- Dweck, C. S. (1999). Caution--Praise Can Be Dangerous. *American Educator*, 23(1), 4-9.
- Dweck, C. S. (2000). Self-Theories: Their role in motivation, personality and development. Hove: Psychology Press.
- Dweck, C. S. (2006). *Mindset: The new psychology of success*. Random House Incorporated.
- Dweck, C. S. (2007). The perils and promises of praise. *Kaleidoscope, Contemporary and Classic Readings in Education*, 12, 34-39.
- Dweck, C. S. (2008). *Mindset: The new psychology of success*. Random House Digital, Inc.
- Dweck, C. (2012). *Mindset: changing the way you think to fulfil your potential*. Hachette UK.
- Dweck, C. (2015). Carol Dweck revisits the growth mindset. *Education Week*, 35(5), 20-24.

- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological review*, 95(2), 256.
- Dweck, C. S., & Master, A. (2008). Self-theories motivate self-regulated learning. *Motivation and self-regulated learning: Theory, research, and applications*, 31-51.
- Dwyer, S. C., & Buckle, J. L. (2009). The space between: On being an insider-outsider in qualitative research. *International journal of qualitative methods*, 8(1), 54-63.
- Eccles, J. S., Wigfield, A., & Schiefele, U. (1998). Motivation to succeed. In W. Damon & N. Eisenberg (Ed.), *Handbook of child psychology: Social, emotional, and personality development* (pp. 1017-1095). Hoboken, NJ, US: John Wiley & Sons Inc.
- Elder Jr, G. H., & Liker, J. K. (1982). Hard times in women's lives: Historical influences across forty years. *American Journal of Sociology*, 88(2), 241-269.
- England, K. V. (1994). Getting personal: Reflexivity, positionality, and feminist research\*. *The Professional Geographer*, 46(1), 80-89.
- Erikson, E. H. (1959). Identity and the life cycle: Selected papers.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4.
- Evans, C. (2013). Making sense of assessment feedback in higher education. *Review of educational research*, 83(1), 70-120.
- Fan X, Liu Q, Liu Y, 2009. A social adaptation comparison of migrant children, rear children, and ordinary children. *J. Beijing Normal Univ. Soc. Sci* 215, 33–40.
- Feltz, D. L., & Lirgg, C. D. (2001). Self-efficacy beliefs of athletes, teams, and coaches. *Handbook of sport psychology*, 2(2001), 340-361.

- Feltz, D. L., & Magyar, T. M. (2006). Self-efficacy and adolescents in sport and physical activity. *Self-efficacy beliefs of adolescents*, 4, 161-179.
- Festinger, L. (1954). A theory of social comparison processes. *Human relations*, 7(2), 117-140.
- Fyans, L. J., Salili, F., Maehr, M. L., & Desai, K. A. (1983). A cross-cultural exploration into the meaning of achievement. *Journal of Personality and Social Psychology*, 44(5), 1000.
- Gainor, K. A., & Lent, R. W. (1998). Social cognitive expectations and racial identity attitudes in predicting the math choice intentions of Black college students. *Journal of Counseling Psychology*, 45(4), 403.
- Gammage, K. L., Hardy, J., & Hall, C. R. (2001). A description of self-talk in exercise. *Psychology of Sport and Exercise*, 2(4), 233-247.
- Gao Y, Li LP, Kim JH, Congdon N, Lau J, Griffiths S, 2010. The impact of parental migration on health status and health behaviours among left behind adolescent school children in China. *BMC Public Health* 10. [\[PMC free article\]](#) [\[PubMed\]](#)
- Gibson, A. S. C., Baden, D. A., Lambert, M. I., Lambert, E. V., Harley, Y. X., Hampson, D., & Noakes, T. D. (2003). The conscious perception of the sensation of fatigue. *Sports Medicine*, 33(3), 167-176.
- Glaser, B., & Strauss, A. (1967). The discovery of grounded theory. 1967. *Weidenfield & Nicolson, London*, 1-19.
- Goethals, G. R., & Darley, J. M. (1987). Social comparison theory: Self-evaluation and group life. In *Theories of group behaviour* (pp. 21-47). Springer, New York, NY.
- Gordon, V. N. (1998). Career decidedness types: A literature review. *The Career Development Quarterly*, 46(4), 386-403.



- Gould, D., Eklund, R. C., & Jackson, S. A. (1992). 1988 US Olympic wrestling excellence: I. Mental preparation, precompetitive cognition, and affect. *The sport psychologist*, 6(4), 358-382.
- Gould, D., Eklund, R. C., & Jackson, S. A. (1993). Coping strategies used by US Olympic wrestlers. *Research quarterly for Exercise and Sport*, 64(1), 83-93.
- Grumet, G. W. (1985). On speaking to oneself. *Psychiatry*, 48(2), 180-195.
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field methods*, 18(1), 59-82.
- Guo, Z., & Lamb, S. (2010). *International comparisons of China's technical and vocational education and training system* (Vol. 12). Springer Science & Business Media.
- Hackett, G. (1985). Role of mathematics self-efficacy in the choice of math-related majors of college women and men: A path analysis. *Journal of counseling psychology*, 32(1), 47.
- Hammersley, M. (1993). On the teacher as researcher. *Educational Action Research*, 1(3), 425-445.
- Hampton, N. Z. (1998). Sources of Academic Self-Efficacy Scale: An assessment tool for rehabilitation counsellors. *Rehabilitation Counselling Bulletin*.
- Hampton, N. Z., & Mason, E. (2003). Learning disabilities, gender, sources of efficacy, self-efficacy beliefs, and academic achievement in high school students. *Journal of school psychology*, 41(2), 101-112.
- Hannum, E., An, X., & Cherng, H. Y. S. (2011). Examinations and educational opportunity in China: Mobility and bottlenecks for the rural poor. *Oxford Review of Education*, 37(2), 267-305.
- Hao, Y. (2012). *The reform and modernization of vocational education and training in China* (No. SP III 2012-304). WZB Discussion Paper.

- Hardy, J. (2006). Speaking clearly: A critical review of the self-talk literature. *Psychology of Sport and Exercise*, 7(1), 81-97.
- Hardy, J., Gammage, K., & Hall, C. (2001). A descriptive study of athlete self-talk. *The Sport Psychologist*, 15(3), 306-318.
- Hardy, J., Hall, C. R., & Hardy, L. (2005). Quantifying athlete self-talk. *Journal of Sports Sciences*, 23(9), 905-917.
- Hardy, L., Jones, G., & Gould, D. (1996). Understanding psychological preparation for sport: Theory and practice of elite performers. Chichester, UK: Jones Wiley & Sons.
- Hatzigeorgiadis, A., Zourbanos, N., Goltsios, C., & Theodorakis, Y. (2008). Investigating the functions of self-talk: The effects of motivational self-talk on self-efficacy and performance in young tennis players. *The Sport Psychologist*, 22(4), 458-471.
- Hau, K. T., & Ho, I. T. (2010). Chinese students' motivation and achievement. *The Oxford handbook of Chinese psychology*, 187-204.
- Hau, K. T., & Salili, F. (1996). Achievement goals and causal attributions of Chinese students. *Growing up the Chinese way: Chinese child and adolescent development*, 121-145.
- Havighurst, R. J. (1953). Human development and education.
- Havighurst, R. J., 1972. *Developmental Task and Education*. New York: McKay.
- Hess, R. D., Chang, C. M., & McDevitt, T. M. (1987). Cultural variations in family beliefs about children's performance in mathematics: Comparisons among People's Republic of China, Chinese-American, and Caucasian-American families. *Journal of Educational Psychology*, 79(2), 179.
- Higbee, K. L. (1969). Fifteen years of fear arousal: research on threat appeals: 1953-1968. *Psychological Bulletin*, 72(6), 426.

- Highlen, P. S., & Bennett, B. B. (1983). Elite divers and wrestlers: A comparison between open-and closed-skill athletes. *Journal of sports psychology*, 5(4), 390-409.
- Ho, D. Y. (1981). Traditional patterns of socialization in Chinese society. *Acta Psychologica Taiwanica*.
- Ho, I. T., & Hau, K. T. (2010). Consequences of the Confucian culture: High achievement but negative psychological attributes? *Learning and Individual Differences*, 20(6), 571-573.
- Hofstede, G. (1984). *Culture's consequences: International differences in work-related values* (Vol. 5). Sage.
- Hofstede, G. (1991). Organizations and cultures: Software of the mind. *McGraw-Hill*, New York.
- Holloway, I., & Todres, L. (2003). The status of method: flexibility, consistency and coherence. *Qualitative research*, 3(3), 345-357.
- Hong, Y. Y., Chiu, C. Y., Dweck, C. S., Lin, D. M. S., & Wan, W. (1999). Implicit theories, attributions, and coping: A meaning system approach. *Journal of Personality and Social psychology*, 77(3), 588.
- Hou Y, 2014. Parental Labour Migration and Left-behind Children's Development in Rural China. European Population Conference, Budapest, Hungary.
- Hsu, S., & Wu, Y. Y. (Eds.). (2015). *Education as cultivation in Chinese culture*. Singapore: Springer.
- Jia Z, Shi L, Cao Y, Delancey J, Tian W, 2010. Health-related quality of life of 'left-behind children': a cross-sectional survey in rural China. *Qual. Life Res* 19, 775–780. [[PubMed](#)]

- Jiang, Z. P., & Zhang, Z. R. (2012). Using social cognitive career theory to predict the academic interests and goals of Chinese middle vocational-technical school students. *Public Personnel Management*, 41(5), 59-68.
- Jones, S. R., Torres, V., & Arminio, J. (2014). Issues in analysis and interpretation. In negotiating the complexities of qualitative research in higher education: Fundamental elements and issues (2nd ed., pp. 157-173). New York, NY: Routledge.
- Kanouse, D. E., Gumpert, P., & Canavan-Gumpert, D. (1981). The semantics of praise. *New directions in attribution research*, 3, 97-115.
- Kim, N. M., Grant, H., & Dweck, C. S. (2000). Views of intelligence: A comparative study of effort and ability beliefs in Korean and American students. *Unpublished manuscript, Columbia University, New York*.
- Klassen, R. M., & Usher, E. L. (2010). Self-efficacy in educational settings: Recent research and emerging directions. *Advances in motivation and achievement*, 16, 1-33.
- Klassen, R.M. (2004) A cross-cultural investigation of the efficacy beliefs of South Asian immigrant and Anglo Canadian non-immigrant early adolescent. *Journal of Educational Psychology*, 96, 731-742.
- Klorer & Stepan, (2015). Off target. China's vocational education and training system threatens the country's rise to industrial superpower status. *China Monitor*, Vol. (2). Mercator Institute for China Studies.
- Knowles, M. S. (1989). Adult learning: Theory and practice. *The handbook of human resource development*, 2.
- Knowles, M. S., Holton III, E. F., & Swanson, R. A. (2012). *The adult learner*. Routledge.

- Komarraju, M., & Nadler, D. (2013). Self-efficacy and academic achievement: Why do implicit beliefs, goals, and effort regulation matter? *Learning and Individual Differences*, 25, 67-72.
- Krauss, S. E. (2005). Research paradigms and meaning making: A primer. *The qualitative report*, 10(4), 758-770.
- Kuang, Y. (2014). Problems and Trends Regarding Vocational Teachers in China. *Chinese Education & Society*, 47(5), 38-46.
- Kuhn, T. S. (2012). *The structure of scientific revolutions*. University of Chicago press.
- Kwan, K. L. K. (2000). Counseling Chinese peoples: Perspectives of filial piety. *Asian Journal of Counseling*, 7(1), 23-41.
- Kwan, V. S., Hui, C. M., & McGee, J. A. (2010). The ancient Greek aphorism, 'Know thyself, represents one of the most fundamental quests for humanity. Scholars of fields as diverse as biology, psychology, philosophy, anthropology, and. *The Oxford Handbook of Chinese Psychology*, 279.
- Lee, K., Cameron, C. A., Xu, F., And, G. F., & Board, J. (1997). Chinese and Canadian Children's Evaluations of Lying and Truth Telling: Similarities and Differences in the Context of pro-and Antisocial Behaviours. *Child development*, 68(5), 924-934.
- Leng L, Park A, 2010. Parental Migration and Child Development in China (Working Paper). Gansu Survey of Children and Families.
- Lent, R. W., & Lopez, F. G. (2002). Cognitive ties that bind: A tripartite view of efficacy beliefs in growth-promoting relationships. *Journal of social and Clinical Psychology*, 21(3), 256-286.

- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of vocational behaviour*, 45(1), 79-122.
- Lent, R. W., Brown, S. D., & Larkin, K. C. (1986). Self-efficacy in the prediction of academic performance and perceived career options. *Journal of counselling psychology*, 33(3), 265.
- Lent, R. W., Lopez, F. G., & Bieschke, K. J. (1991). Mathematics self-efficacy: Sources and relation to science-based career choice. *Journal of counselling psychology*, 38(4), 424.
- Leung, J. J. (1991). Some Cultural Differences in Academic Motivational Orientations between American and Chinese Students.
- Leung, J. J. (1993). Caucasian-and Chinese-American Children's Attitudes toward Schoolwork and Perception of Parental Behaviours That Support Schoolwork.
- Li, J. (2001). Chinese conceptualization of learning. *Ethos*, 29(2), 111-137.
- Li, J. (2002). A cultural model of learning: Chinese "heart and mind for wanting to learn". *Journal of Cross-Cultural Psychology*, 33(3), 248-269.
- Li, J. (2003). US and Chinese cultural beliefs about learning. *Journal of educational psychology*, 95(2), 258.
- Li, H., Ang, R. P., & Lee, J. (2008). Anxieties in Mainland Chinese and Singapore Chinese adolescents in comparison with the American norm. *Journal of Adolescence*, 31(5), 583-594.
- Li, S., & Dai, Q. (2009). Chinese traditional culture and mathematics education. In J. Wang (Ed.), *Mathematics education in China: tradition and reality* (pp. 1-30). Nanjing: Jiangsu education press. (In Chinese)

- Li. S., & Song, H. (2014). The development of vocational education: The lower position has not changed (Tencent education). Retrieved March 19, 2014, from <http://edu.qq.com/a/20140319/018690.htm>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry* (Vol. 75). Sage.
- Linderman, E. (1926). The meaning of adult education. New York, NY: New Republic.
- Liu Z, Li X, Ge X, 2009. Left too early: the effects of age at separation from parents on Chinese rural children's symptoms of anxiety and depression. *Am. J. Public Health* 99, 2049–2054. [[PMC free article](#)] [[PubMed](#)]
- Lopez, F. G., & Lent, R. W. (1992). Sources of mathematics self-efficacy in high school students. *The Career Development Quarterly*, 41(1), 3-12.
- Lopez, F. G., Lent, R. W., Brown, S. D., & Gore, P. A. (1997). Role of social–cognitive expectations in high school students' mathematics-related interest and performance. *Journal of Counseling Psychology*, 44(1), 44.
- Maddux, J. E., & Rogers, R. W. (1983). Protection motivation and self-efficacy: A revised theory of fear appeals and attitude change. *Journal of experimental social psychology*, 19(5), 469-479.
- Maehr, M. L., & Braskamp, L. A. (1986). The motivational factor: A theory of personal investment. *Lexington, MA: Lexington Books*.
- Maehr, M. L., & Nicholls, J. G. (1980). Culture and achievement motivation: A second look. *Studies in cross-cultural psychology*, 2, 221-267.
- Mahoney, M. J. (1979). Cognitive skills and athletic performance. *Cognitive-behavioral interventions: Theory, research, and procedures*, 423-443.
- Mandel, B (1993, July 25). Barbeque: The link to success. *San Francisco Examiner*, pp. B1-B2.

- Marecek, J. (2003). Dancing through minefields: Toward a qualitative stance in psychology.
- Marsh, H. W. (1990). Causal ordering of academic self-concept and academic achievement: a multiwave, longitudinal panel analysis. *Journal of educational psychology, 82*(4), 646.
- Marsh, H. W. (1992). Content specificity of relations between academic achievement and academic self-concept. *Journal of educational psychology, 84*(1), 35.
- Marsh, H. W., & Craven, R. G. (2006). Reciprocal effects of self-concept and performance from a multidimensional perspective: Beyond seductive pleasure and unidimensional perspectives. *Perspectives on psychological science, 1*(2), 133-163.
- Marsh, H. W., & Yeung, A. S. (1997). Causal effects of academic self-concept on academic achievement: Structural equation models of longitudinal data. *Journal of educational psychology, 89*(1), 41.
- Marsh, H. W., Trautwein, U., Lüdtke, O., Köller, O., & Baumert, J. (2005). Academic self-concept, interest, grades, and standardized test scores: Reciprocal effects models of causal ordering. *Child development, 76*(2), 397-416.
- Marshall, B., Cardon, P., Poddar, A., & Fontenot, R. (2013). Does sample size matter in qualitative research? A review of qualitative interviews in IS research. *Journal of Computer Information Systems, 54*(1), 11-22.
- Marton, F., Dall 'Alba, G., & Tse, L. K., (1996). Memorising and understanding: the key to paradox. *The Chinese learner: Cultural, Psychological and Contextual Influences*, 69-83.
- Marton, F., Wen, Q., & Wong, K. C. (2005). 'Read a hundred times and the meaning will appear...' Changes in Chinese University students' views of the temporal structure of learning. *Higher Education, 49*(3), 291-318.



- Marziller, J., & Eastman, C. (1984). Continuing problems with self-efficacy theory: A reply to Bandura. *Cognitive Therapy and Research*, 8(3), 257-262.
- Maslow, A. (1987). H. (1970). *Motivation and personality*, 2.
- Maslow, A. H. (1972). *Defense and growth* (pp. 43-51). Little, Brown, Boston.
- Matsui, T., Matsui, K., & Ohnishi, R. (1990). Mechanisms underlying math self-efficacy learning of college students. *Journal of Vocational Behavior*, 37(2), 225-238.
- Maxwell, J. A. (2011). Paradigms or toolkits? Philosophical and methodological positions as heuristics for mixed methods research. *Mid-Western Educational Researcher*, 24(2), 27-30.
- Maxwell, J. A. (2012). *Qualitative research design: An interactive approach* (Vol. 41). Sage publications.
- McPherson, G. E., & Zimmerman, B. J. (2002). Self-regulation of musical learning. In *The new handbook of research on music teaching and learning: A project of the Music Educators National Conference* (pp. 327-347). Oxford University Press.
- Merkle, E. C., & Van Zandt, T. (2006). An application of the Poisson race model to confidence calibration. *Journal of Experimental Psychology: General*, 135(3), 391.
- Merton, R. K. (1972). Insiders and outsiders: A chapter in the sociology of knowledge. *American journal of sociology*, 78(1), 9-47.
- Ministry of Education China, (2010). Outline of China's national plan for medium and long-term education reform and development (2010-2010). Retrieved from [https://internationaleducation.gov.au/News/newsarchive/2010/Documents/China\\_Education\\_Reform\\_pdf.pdf](https://internationaleducation.gov.au/News/newsarchive/2010/Documents/China_Education_Reform_pdf.pdf)

- Ministry of Education China, (2017). Achievements and the way ahead for China's vocational education. China Education Review 2017. Retrieved from [http://en.moe.gov.cn/Specials/Review/Highlights/201806/t20180606\\_338547.html](http://en.moe.gov.cn/Specials/Review/Highlights/201806/t20180606_338547.html). Retrieved 2/7/2018
- Moran, A. P. (2016). *The psychology of concentration in sport performers: A cognitive analysis*. Psychology Press.
- Morin, A. (2005). Possible links between self-awareness and inner speech theoretical background, underlying mechanisms, and empirical evidence. *Journal of Consciousness Studies*, 12(4-5), 115-134.
- Morooka H, Liang Z, 2009. International migration and the education of left-behind children in Fujian, China. *Asian Pac. Migr. J* 18, 345–370. [[PMC free article](#)] [[PubMed](#)]
- Moses, J. W., & Knutsen, T. L. (2007). Ways of knowing. *Competing Methodologies in Social and Political Research*. Basingstoke & New York: Palgrave Macmillan.
- Moustakas, C. (1990). *Heuristic research: Design, methodology, and applications*. Sage Publications.
- Nagengast, B., & Marsh, H. W. (2012). Big fish in little ponds aspire more: Mediation and cross-cultural generalizability of school-average ability effects on self-concept and career aspirations in science. *Journal of Educational Psychology*, 104(4), 1033.
- Nicholls, J. G. (1984). Achievement motivation: Conceptions of ability, subjective experience, task choice, and performance. *Psychological review*, 91(3), 328.
- Noble, H., & Smith, J. (2015). Issues of validity and reliability in qualitative research. *Evidence Based Nursing*, 18(2), 34-35.

- OCED (2014). OECD, PISA 2012, what students know and can do: Student performance in Mathematics, Reading and Science – Volume1. Retrieved from: [https://www.oecd-ilibrary.org/education/pisa\\_19963777?page=1](https://www.oecd-ilibrary.org/education/pisa_19963777?page=1)
- OECD (2015), OECD Economic Surveys: China – Providing the right skills to all, p. 98. OECD Publishing, Paris, [http://dx.doi.org/10.1787/eco\\_surveys-chn-2015-en](http://dx.doi.org/10.1787/eco_surveys-chn-2015-en)
- Oettingen, G. (1995). Cross-cultural perspectives on self-efficacy. *Self-efficacy in changing societies*, 149-176.
- Ommundsen, Y. (2003). Implicit theories of ability and self-regulation strategies in physical education classes. *Educational Psychology*, 23(2), 141-157.
- Ortlipp, M. (2008). Keeping and using reflective journals in the qualitative research process. *The qualitative report*, 13(4), 695-705.
- Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of educational research*, 66(4), 543-578.
- Pajares, F. (2002). Overview of social cognitive theory and of self-efficacy. <http://www.uky.edu/~eushe2/Pajares/eff.html>. Retrieved November 26, 2017
- Pajares, F. (2007). Culturalizing educational psychology. In F. Salili & R. Hoosain (Eds.), *Culture, motivation, and learning* (pp. 19–42). Charlotte, NC: Information Age
- Pajares, F., & Kranzler, J. (1995). Self-efficacy beliefs and general mental ability in mathematical problem-solving. *Contemporary educational psychology*, 20(4), 426-443.
- Pajares, F., & Miller, M. D. (1994). Role of self-efficacy and self-concept beliefs in mathematical problem solving: A path analysis. *Journal of educational psychology*, 86(2), 193.

- Pajares, F., & Miller, M. D. (1995). Mathematics self-efficacy and mathematics performances: The need for specificity of assessment. *Journal of counselling psychology, 42*(2), 190.
- Pajares, F., & Schunk, D. H. (2001). Self-beliefs and school success: Self-efficacy, self-concept, and school achievement. *Perception, 11*, 239-266.
- Pajares, F., Johnson, M. J., & Usher, E. L. (2007). Sources of writing self-efficacy beliefs of elementary, middle, and high school students. *Research in the Teaching of English, 104*-120.
- Pattinson, E. M., Cotterill, S. T., & Leyland, S. (2017). Sources of self-efficacy in springboard and high board diving: A qualitative investigation. *Sport & Exercise Psychology Review, 13*(1).
- Pennebaker, J. W., & Lightner, J. M. (1980). Competition of internal and external information in an exercise setting. *Journal of personality and social psychology, 39*(1), 165.
- Pianta, R. C., Steinberg, M. S., & Rollins, K. B. (1995). The first two years of school: Teacher-child relationships and deflections in children's classroom adjustment. *Development and psychopathology, 7*(2), 295-312
- PISA, O. (2012). Results in Focus: What 15-year-olds know and what they can do with what they know. 2014-12-03]. [http://www, OECD. org/Pisa,/keyfindings,/pisa-2012-results-overview, pdf](http://www.OECD.org/Pisa/keyfindings/pisa-2012-results-overview.pdf).
- Power, J. (2019). The Influence of Task Difficulty on Engagement, Performance and Self-Efficacy. In *Explorations in Technology Education Research* (pp. 157-169). Springer, Singapore.
- Preston, J., & Epley, N. (2005). Explanations versus applications: The explanatory power of valuable beliefs. *Psychological Science, 16*(10), 826-832.

- Ran, Y., & Chen, J. (2014). Human capital, social capital and employment of graduates from higher vocational colleges: based on an investigation in Zhejiang Province. *Education and Economy*, 2, 40–47.
- Ravitch, S. M., & Riggan, M. (2012). Conceptual frameworks and the analysis of data. *Reason & rigor: How conceptual frameworks guide research*, 81-106.
- Restubog, S. L. D., Florentino, A. R., & Garcia, P. R. J. M. (2010). The mediating roles of career self-efficacy and career decidedness in the relationship between contextual support and persistence. *Journal of vocational behavior*, 77(2), 186-195.
- Ritchie, J. Lewis. 2003. *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. London: Sage Publications.
- Ritchie, J., Lewis, J., & Elam, G. (2003). *Designing and selecting samples* (pp. 77-108). London: Sage.
- Robins, R. W., & Pals, J. L. (2002). Implicit self-theories in the academic domain: Implications for goal orientation, attributions, affect, and self-esteem change. *Self and identity*, 1(4), 313-336.
- Robinson, O. C. (2014). Sampling in interview-based qualitative research: A theoretical and practical guide. *Qualitative Research in Psychology*, 11(1), 25-41.
- Rogers, C. (1998). Motivational indicators in the United Kingdom and the People's Republic of China. *Educational Psychology*, 18(3), 275-291.
- Rogers, R. W. (1975). A protection motivation theory of fear appeals and attitude change<sup>1</sup>. *The journal of psychology*, 91(1), 93-114.
- Russell, G. M., & Bohan, J. S. (1999). HEARING VOICES. *Innovations in Feminist Psychological Research*, 23, 401.

- Russell, G. M., & Kelly, N. H. (2002, September). Research as interacting dialogic processes: Implications for reflexivity. In *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research* (Vol. 3, No. 3).
- Saldaña, J. (2011). *Fundamentals of qualitative research*. OUP USA.
- Saldaña, J. (2015). *The coding manual for qualitative researchers*. Sage.
- Salili, F., Lai, M. K., & Leung, S. S. K. (2004). The consequences of pressure on adolescent students to perform well in school. *Hong Kong Journal of Paediatrics*, 9(4), 329-336.
- Salili, F., & Hau, K. T. (1994). The effect of teachers' evaluative feedback on Chinese students' perception of ability: A cultural and situational analysis. *Educational Studies*, 20(2), 223-236.
- Saunders, M., Lewis, P., & Thornhill, A. (2007). Research methods. *Business Students 4th edition Pearson Education Limited, England*
- Schunk, D. H. (1982). Effects of effort attributional feedback on children's perceived self-efficacy and achievement. *Journal of educational psychology*, 74(4), 548.
- Schunk, D. H. (1983). Ability versus effort attributional feedback: Differential effects on self-efficacy and achievement. *Journal of educational psychology*, 75(6), 848.
- Schunk, D. H. (1984a). Sequential attributional feedback and children's achievement behaviours. *Journal of educational psychology*, 76(6), 1159.
- Schunk, D. H. (1984b). Self-efficacy perspective on achievement behaviour. *Educational Psychologist*, 19(1), 48-58.
- Schunk, D. H. (1987). Peer models and children's behavioural change. *Review of educational research*, 57(2), 149-174.
- Schunk, D. H. (1991). Self-efficacy and academic motivation. *Educational Psychologist*, 26, 207 – 231.

- Schunk, D. H. (1991). Self-efficacy and academic motivation. *Educational psychologist*, 26(3-4), 207-231.
- Schunk, D. H. (2003). Self-efficacy for reading and writing: Influence of modelling, goal setting, and self-evaluation. *Reading & Writing Quarterly*, 19(2), 159-172.
- Schunk, D. H., & Cox, P. D. (1986). Strategy training and attributional feedback with learning disabled students. *Journal of educational psychology*, 78(3), 201.
- Schunk, D. H., Hanson, A. R., & Cox, P. D. (1987). Peer-model attributes and children's achievement behaviors. *Journal of Educational Psychology*, 79(1), 54.
- Schunk, D. H., & Pajares, F. (2004). Self-efficacy in education revisited: Empirical and applied evidence. *Big theories revisited*, 4, 115-138.
- Schunk, D. H., & Rice, J. M. (1987). Enhancing comprehension skill and self-efficacy with strategy value information. *Journal of Reading Behavior*, 19(3), 285-302.
- Schunk, D. H., & Zimmerman, B. J. (1997). Social origins of self-regulatory competence. *Educational psychologist*, 32(4), 195-208.
- Schunk, D. H., Hanson, A. R., & Cox, P. D. (1987). Peer-model attributes and children's achievement behaviours. *Journal of Educational Psychology*, 79(1), 54.
- Serrant-Green, L. (2002). Black on black: Methodological issues for black researchers working in minority ethnic communities. *Nurse Researcher (through 2013)*, 9(4), 30.
- Shavelson, R. J., Hubner, J. J., & Stanton, G. C. (1976). Self-concept: Validation of construct interpretations. *Review of educational research*, 46(3), 407-441.
- Sivesind, K. (1999). Structured, qualitative comparison. *Quality & Quantity*, 33(4), 361-380.

- Song, Y., & Zhang, Y. (2009). Parental migration, child health and healthcare services utilization in rural China. *Population Research*, 33(6), 57-66.
- Stephens, M. A. P., Franks, M. M., Rook, K. S., Iida, M., Hemphill, R. C., & Salem, J. K. (2013). Spouses' attempts to regulate day-to-day dietary adherence among patients with type 2 diabetes. *Health Psychology*, 32(10), 1029.
- Stevens, T., Wang, K., Olivárez, A., & Hamman, D. (2007). Use of self-perspectives and their sources to predict the mathematics enrolment intentions of girls and boys. *Sex roles*, 56(5-6), 351.
- Stevenson, H. W., & Lee, S. (1996). The academic achievement of Chinese students. In M. H. Bond (Ed.), *The handbook of Chinese psychology* (pp. 124-142). New York, NY, US: Oxford University Press.
- Stevenson, H. W., Lee, S. Y., Chen, C., Stigler, J. W., Hsu, C. C., Kitamura, S., & Hatano, G. (1990). Contexts of achievement: A study of American, Chinese, and Japanese children. *Monographs of the society for research in child development*, i-119.
- Stewart, V. (2015). Made in China: Challenge and Innovation in China's Vocational Education and Training System. International Comparative Study of Leading Vocational Education Systems. *National Center on Education and the Economy*.
- Su S, Li X, Lin D, Xu X, Zhu M, 2013. Psychological adjustment among left-behind children in rural China: the role of parental migration and parent-child communication. *Child Care Health Dev.* 39, 162–170. [\[PubMed\]](#)
- Takata, C., & Takata, T. (1976). Influence of models on evaluation of ability. Two functions of social comparison processes. *Japanese Journal of Psychology*, 47(2), 74-84.



- Talsma, K., Schütz, B., & Norris, K. (2019). Miscalibration of self-efficacy and academic performance: Self-efficacy ≠ self-fulfilling prophecy. *Learning and Individual Differences*, 69, 182-195.
- Taylor, S. J., Bogdan, R., & DeVault, M. (2015). *Introduction to qualitative research methods: A guidebook and resource*. John Wiley & Sons.
- TIMSS & PIRLS (2016). 20 Years of TIMSS: International Trends in Mathematics and Science Achievement, Curriculum, and Instruction, TIMSS & PIRLS International Study Center, MA, USA. Retrieved from: <http://timssandpirls.bc.edu/timss2015/international-results/timss2015/wp-content/uploads/2016/T15-20-years-of-TIMSS.pdf>
- Tod, D., Hardy, J., & Oliver, E. (2011). Effects of self-talk: A systematic review. *Journal of Sport and Exercise Psychology*, 33(5), 666-687.
- Tong, N., Zhao, R., & Yang, X. (1985). An investigation into the current ideology of middle school students. *Chinese Education*, 17(4), 6-21.
- Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological review*, 96(3), 506.
- Tschannen-Moran, M., & Barr, M. (2004). Fostering student learning: The relationship of collective teacher efficacy and student achievement. *Leadership and policy in schools*, 3(3), 189-209.
- Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and teacher education*, 17(7), 783-805.
- Tschannen-Moran, M., & McMaster, P. (2009). Sources of self-efficacy: Four professional development formats and their relationship to self-efficacy and implementation of a new teaching strategy. *The Elementary School Journal*, 110(2), 228-245.
- Urduan, T., & Pajares, F. (Eds.). (2006). *Self-efficacy beliefs of adolescents*. IAP.

- Usher, E. L. (2009). Sources of middle school students' self-efficacy in mathematics: A qualitative investigation. *American Educational Research Journal*, 46(1), 275-314.
- Usher, E. L., & Pajares, F. (2006a). Sources of academic and self-regulatory efficacy beliefs of entering middle school students. *Contemporary Educational Psychology*, 31(2), 125-141.
- Usher, E. L., & Pajares, F. (2006b). Inviting confidence in school: Invitations as a critical source of the academic self-efficacy beliefs of entering middle school students. *Journal of Invitational Theory and Practice*, 12, 7-16.
- Usher, E. L., & Pajares, F. (2008). Sources of self-efficacy in school: Critical review of the literature and future directions. *Review of educational research*, 78(4), 751-796.
- Usher, E. L., & Pajares, F. (2009). Sources of self-efficacy in mathematics: A validation study. *Contemporary educational psychology*, 34(1), 89-101.
- Van Raalte, J. L., Brewer, B. W., Rivera, P. M., & Petitpas, A. J. (1994). The relationship between observable self-talk and competitive junior tennis players' match performances. *Journal of Sport and Exercise Psychology*, 16(4), 400-415.
- Wang, Q., & Li, J. (2003). Chinese children's self-concepts in the domains of learning and social relations. *Psychology in the Schools*, 40 (1), 85-101.
- Watkins, D. A., & Biggs, J. B. (1996). *The Chinese learner: Cultural, psychological, and contextual influences*. Comparative Education Research Centre, Faculty of Education, University of Hong Kong, Pokfulam Road, Hong Kong; The Australian Council for Educational Research, Ltd., 19 Prospect Hill Road, Camberwell, Melbourne, Victoria 3124, Australia.

- Watkins, D., & Cheng, C. (1995). The revised Causal Dimension Scale: a confirmatory factor analysis with Hong Kong students. *British Journal of Educational Psychology*, 65(2), 249-252.
- Webster, M., & Sobieszek, B. (1974). *Sources of self-evaluation: A formal theory of significant others and social influence*. John Wiley & Sons.
- Weinberg, R. S. (1988). *The mental advantage: Developing your psychological skills in tennis*. Human Kinetics Publishers.
- Weinberg, R., Gould, D., & Jackson, A. (1979). Expectations and performance: An empirical test of Bandura's self-efficacy theory. *Journal of sports psychology*, 1(4), 320-331.
- Weinberg, R., Grove, R., & Jackson, A. (1992). Strategies for building self-efficacy in tennis players: A comparative analysis of Australian and American coaches. *The Sport Psychologist*, 6(1), 3-13.
- Wen, M., & Lin, D. (2012). Child development in rural China: Children left behind by their migrant parents and children of non-migrant families. *Child development*, 83(1), 120-136.
- Wigfield, A., & Karpathian, M. (1991). Who am I and what can I do? Children's self-concepts and motivation in achievement situations. *Educational Psychologist*, 26(3-4), 233-261.
- Wigfield, A., Eccles, J. S., Yoon, K. S., Harold, R. D., Arbreton, A. J., Freedman-Doan, C., & Blumenfeld, P. C. (1997). Change in children's competence beliefs and subjective task values across the elementary school years: A 3-year study. *Journal of educational psychology*, 89(3), 451.
- Wilkins, P. B. B. (2014). Efficacy of a growth mindset intervention to increase student achievement.

- Willis, J. (2007). History and foundations of interpretivist research. *Foundations of qualitative research: Interpretive and critical approaches*, 95-146.
- Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of management Review*, 14(3), 361-384.
- Wu, Y. (2015). The examination system in China: The case of Zhongkao mathematics. In *Selected Regular Lectures from the 12th International Congress on Mathematical Education* (pp. 897-914). Springer, Cham.
- Xinhua Net (2014). The State Department issued < The decision of accelerating the development of modern vocational education > Retrieved from [http://news.xinhuanet.com/politics/2014-06/22/c\\_1111255199.htm](http://news.xinhuanet.com/politics/2014-06/22/c_1111255199.htm).
- Xiong, J. (2011). Understanding higher vocational education in China: Vocationalism vs Confucianism. *Frontiers of Education in China*, 6(4), 495-520.
- Yang, L., Arens, A. K., & Watkins, D. A. (2016). Testing the twofold multidimensionality of academic self-concept: a study with Chinese vocational students. *Educational Psychology*, 36(9), 1651-1669.
- Yu, A. B. (1996). Ultimate life concerns, self, and Chinese achievement motivation. In M. H. Bond (Ed.), *The handbook of Chinese psychology* (pp. 227-246). New York, NY, US: Oxford University Press.
- Zeldin, A. L., & Pajares, F. (2000). Against the odds: Self-efficacy beliefs of women in mathematical, scientific, and technological careers. *American Educational Research Journal*, 37(1), 215-246.
- Zhang L, Tang R, Hu Y, Xu D, 2006. A study on subjective well-being of children stayed in the country and parenting styles. *China J. Health Psychology* 14, 368–370.
- Zhang, D. (1996). “Coping with examination” and “examination-oriented education”. *Mathematical teaching*, 6. (In Chinese)

- Zhang, Y. (2014). Discussion of Sino-Foreign Cooperation Models for Higher Vocational Institutions. *Chinese Education & Society*, 47(5), 86-94.
- Zhang, J., Yuen, M., & Chen, G. (2015). Career-related parental support for vocational school students in China. *International Journal for the Advancement of Counselling*, 37(4), 346-354.
- Zhao, L. (2016). Vocational Education in China. EAI Background Brief No. 1179. <http://www.eai.nus.edu.sg/publications/files/BB1179.pdf>. Retrieved 2/7/2018.
- Zhou W, Gao W, Sun X, Luo J, 2011. Psychological resilience features of urban migrant children and rural left-behind children in Sichuan province of China. *Beijing Da Xue Xue Bao Yi Xue Ban. J. Peking Univ. Health Sci* 43, 386–390. [\[PubMed\]](#)
- Zimmerman, B. J. (2000). Self-efficacy: An essential motive to learn. *Contemporary educational psychology*, 25(1), 82-91.
- Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory into practice*, 41(2), 64-70.
- Zimmerman, B. J., & Bandura, A. (1994). Impact of self-regulatory influences on writing course attainment. *American educational research journal*, 31(4), 845-862.
- Zimmerman, B. J., & Cleary, T. J. (2006). Adolescents' development of personal agency: The role of self-efficacy beliefs and self-regulatory skill. *Self-efficacy beliefs of adolescents*, 5, 45-69.
- Zimmerman, B. J., & Martinez-Pons, M. (1990). Student differences in self-regulated learning: Relating grade, sex, and giftedness to self-efficacy and strategy use. *Journal of educational Psychology*, 82(1), 51.

Zinsser, N., Bunker, L., & Williams, J. M. (1998). Applied Sport Psychology: Personal Growth to Peak Performance. *Cognitive techniques for building confidence and enhancing performance*, 291.

Zinsser, N., Bunker, L., & Williams, J. M. (2006). Cognitive techniques for building confidence and enhancing performance. *Applied sport psychology: Personal growth to peak performance*, 5, 349-381.

## APPENDIX A – VPREC Approval



UNIVERSITY OF  
**LIVERPOOL**

**ONLINE**  
**PROGRAMMES**

Dear Anna Quek			
I am pleased to inform you that the EdD. Virtual Programme Research Ethics Committee (VPREC) has approved your application for ethical approval for your study. Details and conditions of the approval can be found below.			
Sub-Committee:	EdD. Virtual Programme Research Ethics Committee (VPREC)		
Review type:	Expedited		
PI:			
School:	Lifelong Learning		
Title:	Understanding Influences on Chinese Vocational Education Students Self-Efficacy Development		
First Reviewer:	Dr. Marco Ferreira		
Second Reviewer:	Dr. Kalman Winston		
Other members of the Committee	Julie-Anne Regan, Michael Watts, Dimitrios Vlachopoulos.		
Date of Approval:	12 <sup>nd</sup> July 2016		
The application was APPROVED subject to the following conditions:			
<b>Conditions</b>			
1	Mandatory	M: All serious adverse events must be reported to the VPREC within 24 hours of their occurrence, via the EdD Thesis Primary Supervisor.	

This approval applies for the duration of the research. If it is proposed to extend the duration of the study as specified in the application form, the Sub-Committee should be notified. If it is proposed to make an amendment to the research, you should notify the Sub-Committee by following the Notice of Amendment procedure outlined at <http://www.liv.ac.uk/media/livacuk/researchethics/notice%20of%20amendment.doc>.

Where your research includes elements that are not conducted in the UK, approval to proceed is further conditional upon a thorough risk assessment of the site and local permission to carry out the research, including, where such a body exists, local research ethics committee approval. No documentation of local permission is required (a) if the researcher will simply be asking organizations to distribute research invitations on the researcher's behalf, or (b) if the researcher is using only public means to identify/contact students. When medical, educational, or business records are analysed or used to identify potential research students, the site needs to explicitly approve access to data for research purposes (even if the researcher normally has access to that data to perform his or her job).

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Please note that the approval to proceed depends also on research proposal approval.



## APPENDIX B – Invitation to Participate



### INVITATION TO PARTICIPATE

Dear Students,

I am a professional doctorate candidate at the University of Liverpool, studying the Doctor of Education degree.

Presently I am conducting research for my thesis which is titled “Understanding the Influences of Chinese Vocational Education Students Self-efficacy Development”. Simply put, my study seeks to understand how or what information Chinese vocational education students use to help them develop their self-belief in their capability to become successful with their studies. The benefits of this study will be that teachers and education institutions can learn from your learning experiences to help them with teaching and learning strategies, to help other Chinese students become more successful learners in the future.

I am seeking local Chinese students from the final year students on the Sino-Australian joint-venture programme to take part in this research. The decision to participate is **strictly voluntary and information collected from each student will be kept strictly confidential**. When I write my thesis, you will be given a pseudonym or fictional name so that your identity will remain anonymous and unidentifiable. You can withdraw from this study at any time until all data collected has been analysed, without any consequences.

The initial interview will be a face to face one. I will travel to Suzhou to meet with you personally. The interview will be about one hour and no longer than 90 minutes. However, I may have some follow-up questions to clarify anything that I don't understand from the interview, so with your agreement, I would schedule another meeting on Skype or similar application to discuss. This should be no more than 30 minutes. Our face to face interview will take place at a commonly agreed where you feel comfortable that your privacy is being protected.

If you are interested to help me with this research through your participation, please email me to let me know at [anna.quek@online.liverpool.ac.uk](mailto:anna.quek@online.liverpool.ac.uk) (by 31 August 2016) and also provide the following information:

- a) Name; b) Which part of China you come from? c) Age.

Thank you for taking the time to read this.

Anna Quek (EdD Candidate – University of Liverpool)

## APPENDIX C – Participant's Information Sheet



### Participant's Information Sheet

#### Title of Study

"Understanding the influences on Chinese Vocational Students Self-Efficacy Development"

#### Dated

Version: 1

#### Invitation

You are invited to participate in a doctoral research study. Before you decide to participate, it is important for you to understand why the aims of the research and what is involved. Please read the following information carefully and do not hesitate to ask me any questions or if there is anything you would like me to clarify for better understanding. Please feel free to discuss with your teachers or friends and family if you wish before you make a decision. I would like to stress that participation is strictly on a voluntary basis and that you should only agree to take part of your own free will.

Thank you for reading this.

#### 1. What is the purpose of the study?

The purpose of this study is to gain a better understanding the influences of Chinese vocational education students' self-belief development. As an educator/researcher, my ultimate goal is to address issues related to students' development and achievements that could help teachers and education institutions develop learning and teaching strategies to help students who are at risk of failing or struggling with their studies. Therefore, by you agreeing to share your learning experience can contribute a lot to this study in developing a better understanding of the influences on self-belief development which is considered by many researched findings to be beneficial influencing individual achievements.

#### 2. Why have I been chosen to take part?

This study is to investigate the influences on an individual's self-belief development which is considered by social psychologists as important in predicting a person's achievements. Although each one of us have different definition of successes, it is the aim of this study to find out the influences that you draw confidence from to help you overcome difficulties in your studies to help you become successful with your studies. This study has chosen final year students on this JV programme as these students would have experience overcoming the different hurdles at the different stages of this programme to provide valuable information for this study.

**3. Do I have to take part?**

The participation in this research is totally voluntary. Should you wish to accept the invitation to participate, please be informed that you are free to withdraw your participation at any time until data is analysed without any consequence or explanations needed. You can ask that any data you have provided to be omitted in the study. This way, your identity will be kept confidential.

**4. What will happen if I take part?**

If you agree to take part, you will be interviewed by me, the researcher. You will be asked questions relating to your learning experience as a student that help you achieve success in your studies. The interview will be one hour long and no more than 90 minutes. However, it may be necessary to schedule a follow up meeting on Skype or similar apps, for the researcher to clarify some points of the interview that is unclear. The interview will be a face to face one and it will take place at a mutually agreed time and place that you are comfortable that your privacy can be maintained.

With your permission, the interviews will be digitally recorded so that I have an accurate record of what was discussed to produce a transcript that is accurate for analysis. You will be asked to choose a pseudonym to represent you or one will be assigned for you. This way your identity will be kept confidential in the data and thesis report. To ensure confidentiality of your information, the recording of the interview and the transcript will be stored in electronic files that are password protected for five years. The data collected from you will be used strictly for the purpose of writing my thesis and any relevant research papers.

**5. Risk, Benefits and Expenses**

It is not expected that you will encounter any risk or harm through your participation in this research. The interview will be about your academic experiences and influences on your achievements. You can decide what you want to disclose in the interview. However, should you experience any discomfort or distress whilst telling your story, the interview can be paused or terminated if you wished. You are also free to withdraw from participation at any time without any explanation or consequence.

You are not expected to have to incur any expenses as the interview will take place at a mutually agreed time and place that will be most convenient for you. There are no gifts or payments for participating in this study.

There are no direct or immediate benefits for taking part, however it is possible that by talking about your learning experiences, it could help you reflect and gain more meaning of those experiences. Your participation will contribute information that could be beneficial to help teachers and institutions to develop teaching and learning strategies to help students in the future.

**6. What if I am unhappy or if there is a problem?**

If you are unhappy, or if there is a problem, please feel free to let us know by contacting me ([anna.quek@online.liverpool.ac.uk](mailto:anna.quek@online.liverpool.ac.uk)) or my supervisor ([hazel.brown@online.liverpool.ac.uk](mailto:hazel.brown@online.liverpool.ac.uk)) and we will try to help. If you remain unhappy or have a complaint which you feel you cannot come to us with then you should contact the Research Governance Officer [liverpoolethics@online.liverpool.ac.uk](mailto:liverpoolethics@online.liverpool.ac.uk). When contacting the Research Governance Officer,

please provide details of the name or description of the study (so that it can be identified), the researcher involved, and the details of the complaint you wish to make.”

**7. Will my participation be kept confidential?**

Yes, your identity will be kept confidential and not be identifiable in the thesis. A pseudonym or fictional name will be used for each student. The information collected from each student will be used for the purpose of my thesis. But there may be other opportunities to use the data of this study for subsequent publications. All files of recorded interviews and transcripts will be stored and backed up in electronic files that are password protected. This information will be deleted after five years.

**8. What will happen to the results of the study?**

The information collected from the interviews will be transcribed and analysed. You will be given the opportunity to comment on the transcript from your interview. Some information from the interviews may be quoted exactly as it was spoken if they are relevant to highlight important points. The results of the analysis will be written in my thesis to fulfil the requirements of my Doctor of Education degree. A copy of the thesis can be provided to you if you so wish. You will not be identifiable from the results.

**9. What will happen if I want to stop taking part?**

You can withdraw from participation at any time, until the information of the interview has been analysed. You can withdraw without any explanation or consequences. Results up to the time of withdrawal may be used if you are happy to allow this to be done. Otherwise you may request that the information collected from you is destroyed and no further use is made of them.

**10. Who can I contact if I have further questions?**

You can contact the **Principal Investigator:** Anna Quek. **Telephone no:** +66-843772632. **E-mail:** anna.quek@online.liverpool.ac.uk

**I hereby declare that I have no conflict of interest in undertaking this study as my professional role is separate from what is being researched.**

Anna Quek

University of Liverpool

Professional Doctorate Candidate

## APPENDIX D – Student Consent Form



### Committee on Research Ethics

#### STUDENT CONSENT FORM

<b>Title of Research Project:</b>	Understanding Influences on Chinese Vocational Students Self-Efficacy Belief Development	<b>Please initial box</b>
<b>Researcher(s):</b>	Anna Quek	
1. I confirm that I have read and have understood the information sheet dated [DATE] for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily		<input type="checkbox"/>
2. I understand that my participation is voluntary and that I am free to withdraw at any time until data is analysed: without giving any reason, without my rights being affected. In addition, should I not wish to answer any particular question or questions, I am free to decline.		<input type="checkbox"/>
3. I understand that, under the Data Protection Act, I can at any time ask for access to the information I provide and I can also request the destruction of that information if I wish.		<input type="checkbox"/>
4. I understand that confidentiality and anonymity will be maintained and I will be given the option to choose or otherwise provided with a pseudonym and it will not be possible to identify me in any publications.		<input type="checkbox"/>
5. I understand that the electronic data collected from me will be kept secure under password encrypted files. Any hard copy documents will be kept secure in a safe box.		<input type="checkbox"/>
6. I agree for the data collected from me to be used in future research. and understand that the use of any of the identifiable data would be reviewed and approved by a research ethics committee beforehand.		<input type="checkbox"/>
7. I understand and agree that my interview session/s will be digitally recorded and I am aware of and agree to the use of these recordings for the following purposes: a. Transcription and analysis of data by the researcher for completion of her EdD thesis. b. Transcription and analysis of data by the researcher for inclusion in any future publication.		<input type="checkbox"/>
8. I agree to take part in the above study.		<input type="checkbox"/>

_____	_____	_____
Student Name	Date	Signature

_____	_____	_____
Name of Person taking consent	Date	Signature

Anna Quek		
_____	_____	_____
Researcher	Date	Signature

**Principal Investigator:**

Name Anna Quek

Work Address: Aspire Sukhumvit 48, N-Tower, Sukhumvit 48, Klong Toey, Bangkok, 10110,Thailand

Work Telephone: +66-843772632

Work Email: anna.quek@online.liverpool.ac.edu

## APPENDIX E - Interview Protocol

This study adopted semi-structured interviews to gather information from the individual students. This interview protocol includes administrative briefing script, questions to collect demographic information about the students, interview questions set out below acted as guidelines and prompts to keep the interview focused on collecting data relevant to the research questions, debriefing script and table showing the alignment of interview questions to research questions.

### **Administrative Briefing Script – Consent Forms to Sign by Student**

Thank you for agreeing to this interview Mr/Miss. XX. As previously mentioned, I am conducting this interview as part of my professional doctorate research on the influences on Chinese vocational students' self-belief development. Self-belief is considered by researchers to be important in predicting academic success. The understanding of what influences the development of self-belief in Chinese students is an area that is under researched therefore this study could provide very useful knowledge to inform educators.

As a final year student on this JVP programme, you have many learning experiences that could benefit this research, thank you for volunteering. I am grateful for your participation and appreciate you giving your time to contribute to this study.

If you don't mind, I would like to digitally record this conversation to ensure that I do not miss anything important. I have prepared a release consent form for you to sign. For your information, this audio recording is accessible only to me (the researcher) and will be erased after the conversation has been transcribed.

Thank you again for your agreeing to participate.

This interview will take about 1 hour. I will first start with some general questions about yourself and your background, then move on to questions about your learning experiences, how you deal with obstacles in your learning experience, and influences on your confidence development (building) over the past few years on the JVP programme.

Please feel free to ask me to clarify any questions you are not sure of. It is important for you to remember that there are no wrong or right answers at all. The questions are only there to help guide us in this interview. If at any part of the interview, you feel you need to add information that is not in the questions, please feel free to include them in your responses.

## **Interview Questions**

### **1) Interviewee's Background**

#### **a) Can you tell me about yourself and our background e.g.**

- How old are you?
- Are you from Suzhou? If not which part of China do you come from and how long have you lived in Suzhou?
- Are you a single child?
- What is your ambition?
- What are your parents' occupations?

i. What education qualifications did your parents attain?

### **2) When did you start studying at STFI?**

### **3) Did you choose STFI or did the Education Bureau assign you to this school?**



- 4) When did you decide to join the JVP?**
- a. What were your reasons/motivation for choosing this major?
  - b. Did your parents or other family members have any influence on your choice of school and/or major?
- 5) Did you receive any advice or encouragement from other people e.g. family, friends, classmates or teachers to attend this programme?**
- 6) Before you were admitted into this JVP, how confident would you rate your ability on a score of 1 to 10 in passing the entrance exam for this program? (1 for no confidence and 10 for highly confident)**
- a. Can you tell me how you decide on your score?
- 7) After you started on the JVP program, how confident would you rate your ability on a score of 1 to 10 in successfully completing this program?**
- a. Can you elaborate on how you decide on this score?
- 8) Can you describe to me your experience so far on both the STFI and BM parts of the programme e.g.**
- a. Compare your experience studying in Chinese and studying completely in the English language.
  - b. Compare course expectations between STFI and BM.

**9) When you are met with difficulties with your studies or work on this program, who do you turn to for help, and how do you decide who to turn to for help?**

- a. Is there any particular subject/subjects that you are very good at?
- b. Does being very good at this/these subjects make you feel more confident and believe in your capabilities to do well in other subjects?
- c. Do the teachers from both institutions help you with your learning? If so, in what ways? Which ways do you prefer or are effective for you?

**10) Do any of your family members involve themselves or provide support in any way with your studies?**

- a. Can you give me examples of how your family members involve themselves or provide you with support for your studies?

**11) Are you in any kind of study group/s with your classmates or friends?**

- a. If yes - What kind of support do you find beneficial in the study group/s?
- b. If no – Would you like to be in a study group, do you feel that study groups could be beneficial to your studies?

**12) Do you have any role model/models? Can you tell me about him/her/them? e.g.**

- a. What do you admire about him/her/them
- b. What kind of influence does/do your role model/models have on you and your endeavours such as your studies?

**13) Consider situations when you have to try to learn or do something challenging that you have never done before. But you could see that your classmates who you consider to have similar abilities as you are able to succeed with the task. Does this help to give you the confidence that you can succeed too?**

- a. If not, can you explain the effect how you feel in such situations?

**14) In general, do you feel any stress, anxiety, excitement, mentally focused etc., when you have to**

- i. take any kind of exams or tests, or
  - ii. make a presentation or speech or
  - iii. learn or do something new e.g. your industry placement?
- a. Can you tell me how you overcome/handle these situations and how did things turn out?
  - b. Comparing both positive and negative emotional feelings before you attempt these tasks, how would you describe the effects of them on your confidence and performance?
  - c. Do you talk to yourself by telling yourself “you can do it, believe in yourself, you can do it” or similar self-encouragement?

**15) Can you tell me if there is anything in particular at school that you believe you can do very well or be very successful with?**

- a. How did you know this?
- b. Do you believe that with enough effort it is possible for anyone to achieve academic success, no matter how difficult the study is?
- c. What does academic success mean to you? E.g. good grades; pass all courses; being amongst the top 10% in class, etc.?

**16) Consider this common idiom which you may have learnt in your English language classes and there is a similar idiom in Chinese. Can you tell me what meaning do you make of it.**

- a. No pain, no gain.

**17) I would like you to think of a situation or situations (can be your studies or some other activity) when you have achieved success very easily without having to invest much effort. Compare this with a different situation or situations when you have to work really hard to achieve success.**

- a. Can you tell me what these situations were, and how you feel about each of successes achieved?
- b. Can you tell me if any of these two ways of achieving success is more important in building your confidence/belief in your ability?
- c. On a score of 1-10 (one for lowest and 10 for highest) how would you rate previous success's influence on your academic confidence?

**18) Consider a scenario when you have not performed as well as you could or should and your teacher or your parent/s expressed their disappointment with the results. What actions would you take?**

- a. Apply more effort to improve?
- b. Give up because you have done your best and don't believe you can improve with more effort?
- c. Can you elaborate how you evaluate what actions to take in this type of scenario?

**19) What kind of expectations do your parents and other family members have on your academic achievement?**

- a. Would you say that the expectations are the same or varies with each family members?
- b. How do their expectations affect your motivation to succeed?
- c. Is it true that in Chinese culture, everyone has a duty to society to continuously improve themselves especially through education? If so what are your thoughts on this expectation?

**20) Putting aside the expectations of family on your academic achievement, and what are your own thoughts on learning in general?**

- a. Do you feel that learning takes place mostly at school and the teachers are in-charge of your learning plan or do you feel you have personal control over your learning?

**21) Now that you are in the final year of your studies on this programme, can you tell me the high points and low points of your learning experience over this period?**

- a. How would you rate from a score of 1-10 (one for lowest and 10 for highest) the development of confidence in your abilities
  - i. To successfully graduate from this programme?
  - ii. Secure a future in hospitality management?
  - iii. Continue your studies overseas at a university level.
- b. Can you describe to me the most important influences on your development of confidence in your abilities?
  - i. Please rank these influences in the order of 1 for the most important followed by 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> etc.

**22) Do you have any other information that you feel is important to contribute to this study that I have not asked in my questions?**

### **23) DEBRIEFING SCRIPT GUIDE**

We now conclude this interview and thank you so much for your cooperation and contribution to my research. As your real identity will be kept confidence, could you kindly pick a pseudonym (fictitious name) from this box that I will allocate to your interview data.

Once the interview has been transcribed, I may need to follow up with a couple of further questions or need to clarify any information that is unclear from the interview. I will also send you the transcript of this interview for you to verify that the information I have written is accurate and reflects what you said or wanted to say in the interview. If not, you have the opportunity to make corrections to the transcript. Therefore, could

I please have your mobile contact and email address. Also do you have a skype ID or use WhatsApp?

Meanwhile, should you have any further queries, please feel free to contact me. My contact details are on my business card (give student my business card).

Thank you once again for your participation and wishing you the very best with your studies.

## APPENDIX F - Mapping Interview Questions to Research Questions

	RESEARCH QUESTIONS	INTERVIEW QUESTIONS
0	Questions for warming up and establishing context	<p><b>1) Interviewee's Background</b></p> <p><b>2) Can you tell me about yourself and our background e.g.</b></p> <p>a. How old are you?</p> <p>b. Are you from Suzhou? If not which part of China do you come from and how long have you lived in Suzhou?</p> <p>c. Are you a single child?</p> <p>d. What is your ambition?</p> <p>e. What are your parents' occupations?</p> <p>i. What education qualifications did your parents attain?</p> <p><b>3) When did you start studying at [REDACTED]?</b></p> <p><b>4) Did you choose [REDACTED] or did the Education Bureau assign you to this school?</b></p> <p>a. When did you decide to join the [REDACTED] JVP? And what were your reasons/motivation for choosing this major?</p>



		<p>b. Did your parents or other family members have any influence on your choice of school and/or major?</p> <p><b>8) Can you describe to me your experience so far on both the [REDACTED] and [REDACTED] parts of the programme e.g.</b></p> <p>a. Compare your experience studying in Chinese and studying completely in the English language.</p> <p>b. Compare course expectations between [REDACTED].</p>
1	What are the self-reported sources of academic self-efficacy of Chinese VE students?	<p><b>21) Did you receive any advice or encouragement from other people e.g. family, friends or classmates or teachers to attend this programme?</b></p> <p><b>22) Before you were admitted into this JVP, how confident would you rate your ability on a score of 1 to 10 in passing the entrance exam for this program? (1 for no confidence and 10 for highly confident)</b></p> <p>a. Can you tell me how you decide on your score?</p> <p><b>23) After you started on the JVP program, how confident would you rate your ability on a score of 1 to 10 in successfully completing this program?</b></p> <p>a. Can you elaborate on how you decide on this score?</p>

		<p><b>24) Now that you are in the final year of your studies on this programme, can you tell me the high points and low points of your learning experience over this period?</b></p> <p>a. How would you rate from a score of 1-10 (one for lowest and 10 for highest) the development of confidence in your abilities</p> <p>i.To successfully graduate from this programme?</p> <p>ii.Secure a future in hospitality management?</p> <p>iii.Continue your studies overseas at a university level.</p> <p>b. Can you describe to me the most important influences on your development of confidence in your abilities?</p> <p>i.Please rank these influences in the order of 1 for the most important followed by 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> etc..</p> <p>ii.</p>
2	Do their self-reported sources of self-efficacy correlate with Bandura's four hypothesized sources of self-efficacy namely: mastery, vicarious experience,	<p><b>9) When you are met with difficulties with your studies or work on this program, who do you turn to for help, and how do you decide who to turn to for help?</b></p>

	<p><b>verbal persuasion and physiological state, or are there other self-reported sources of self-efficacy identified?</b></p>	<p>a. Is there any particular subject/subjects that you are very good at?</p> <p>b. Does being very good at this/these subjects make you feel more confident and believe in your capabilities to do well in other subjects?</p> <p>c. Do the teachers from both institutions help you with your learning? If so, in what ways? Which ways do prefer or is more effective for you?</p> <p><b>10) Do any of your family members involved themselves or provide support in any way with your studies?</b></p> <p>a. Can you give me examples of how your family members involve themselves or provide you with support for your studies?</p> <p><b>11) Are you in any kind of study group/s with your classmates or friends?</b></p> <p>a. If yes - What kind of support do you find beneficial in the study group/s?</p>
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		<p>b. If no – Would you like to be in a study group, do you feel that study groups could be beneficial to your studies?</p> <p><b>12) Do you have any role model/models? Can you tell me about him/her/them? e.g.</b></p> <p>a. What do you admire about him/her/them</p> <p>b. What kind of influence does/do your role model/models have on you and your endeavours such as your studies?</p> <p><b>13) Consider situations when you have to try to learn or do something challenging that you have never done before. But you could see that your classmates who you consider to have similar abilities as you are able to succeed with the task. Does this help to give you the confidence that you can succeed too?</b></p> <p>a. If not, can you explain the effect how you feel in such situations</p> <p><b>14) In general, do you feel any stress, anxiety, excitement, mentally focused etc., when you have to</b></p> <p>i. take any kind of exams or tests, or</p>
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		<p>ii. make a presentation or speech or</p> <p>iii. learn or do something new e.g. your industry placement?</p> <p>a. Can you tell me how you overcome/handle these situations and how did things turn out?</p> <p>b. Comparing both positive and negative emotional feelings before you attempt these tasks, how would you describe the effects of them on your confidence and performance?</p> <p>c. Do you talk to yourself e.g. tell yourself “you can do it, belief in yourself, you can do it”?</p> <p><b>17) I would like you to think of a situation or situations (can be your studies or some other activity) when you have achieved success very easily without having to invest much effort. Compare this with a different situation or situations when you have to work really hard to achieve success.</b></p> <p>a. Can you tell me what these situations were, and how you feel about each of successes achieved?</p> <p>b. Can you tell me if any of these two ways of achieving success is more important in building your confidence/belief in your ability?</p>
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		<p>c. On a score of 1-10 (one for lowest and 10 for highest) how would you rate previous success's influence on your academic confidence.</p>
3	<p><b>What cultural value/s do the Chinese students hold about learning and academic achievement, and how do they impact on their academic self-efficacy development?</b></p>	<p><b>16) Consider this common idiom which you may have learnt in your English language classes and there is a similar idiom in Chinese. Can you tell me what meaning do you make of it.</b></p> <p>a. No pain, no gain.</p> <p><b>18) Consider a scenario when you have not performed as well as you could or should and your teacher or your parent/s expressed their disappointment with the results. What actions would you take?</b></p> <p>a. Apply more effort to improve?</p> <p>b. Give up because you have done your best and don't belief you can improve with more effort?</p> <p>c. Can you elaborate how you evaluate what actions to take in this type of scenario?</p>

		<p><b>19) What kind of expectations do your parents and other family members have on your academic achievement?</b></p> <p>a. Would you say that the expectations are the same or varies with each family members?</p> <p>b. How do their expectations affect your motivation to succeed?</p> <p><b>20) Putting aside the expectations of family on your academic achievement, and what are your own thoughts on learning in general?</b></p> <p>a. Do you feel that learning takes place mostly at school and the teachers are in-charge of your learning plan or do you feel you have personal control over your learning?</p>
4	How do students select, weight and integrate sources of SE information into their SE judgements?	<p><b>15) Can you tell me if there is anything in particular at school that you believe you can do well or be successful with?</b></p> <p>i. Can you tell me what this is and how did you know?</p> <p>ii. Do you believe that with enough effort, it is possible for anyone to achieve academic success?</p> <p>iii. What does academic success mean to you? E.g. good grades; pass all courses; being amongst the top 10% in class, etc.?</p>

		<p><b>18) I would like you to think of a situation or situations (can be your studies or some other activity) when you have achieved success very easily without having to invest much effort. Compare this with a different situation or situations when you have to work really hard to achieve success.</b></p> <p>a. Can you tell me what these situations were, and how you feel about each of successes achieved?</p> <p>b. Can you tell me if any of these two ways of achieving success is more important in building your confidence/belief in your ability?</p> <p>c. On a score of 1-10 (one for lowest and 10 for highest) how would you rate previous success's influence on your academic confidence.</p> <p><b>21) Now that you are in the final year of your studies on this programme, can you tell me the high points and low points of your learning experience over this period?</b></p> <p>a. How would you rate from a score of 1-10 (one for lowest and 10 for highest) the development of confidence in your abilities</p>
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		<ol style="list-style-type: none"> <li>1. To successfully graduate from this programme?</li> <li>2. Secure a future in hospitality management?</li> <li>3. Continue your studies overseas at a university level.</li> </ol> <p>b. Can you describe to me the most important influences on your development of confidence in your abilities?</p> <p>i. Please rank these influences in the order of 1 for the most important followed by 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> etc.</p>
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